

VII. IRRIGATION

This chapter describes the procedures unique to the examination of irrigation claims. The following elements are discussed.

- A. Type Of Irrigation System
- B. Flow Rate
- C. Volume
- D. Place Of Use (POU)
- E. Supplemental Rights
- F. Irrigation Districts

The examination procedures for the other elements of an irrigation claim are contained in Chapter VI., Claim Examination.

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A. TYPE OF IRRIGATION SYSTEM

The type of irrigation system is the method used to distribute water across the place of use, such as flood irrigation, sprinkler irrigation, or subirrigation. The type of irrigation system will be used in determining the accuracy of the claimed flow rate and volume. It will be identified in the decree under purpose on each irrigation water right abstract.

1. Identifying The Claimed Type Of Irrigation System.

Using the information in the claim file, check the type of irrigation system identified on the claim form for clerical errors by the claimant, and for consistency with the documentation. If the claimed type of irrigation system is unclear, contact the claimant.

Codes. Codes were used to store the claimed type of system in the computer. When more than one irrigation type was indicated on the claim form (e.g., sprinkler/flood), the proper code was written on the claim form by department staff prior to the information being entered into the computer data base. The codes used when claims were initially input into the computer are as follows:

B	border dike
C	contour ditch
D	spreader dike
F	flood
G	ditch system of other type
H	furrow
P	parallel ditch
S	sprinkler
A	sprinkler/furrow
E	sprinkler/flood
I	furrow/flood
J	sprinkler/furrow/flood
M	multiple methods
X	other

2. Examining Type Of Irrigation System. The type of irrigation system indicated on the claim form and worksheet will be compared with various data sources to determine whether it is supported by the data sources. Check the aerial photograph for evidence of the claimed type of system. For expediency, do this in conjunction with the POU examination. Check the submitted documentation for a discussion of the irrigation method.

When the claimant's intent is unclear, the claimant must be contacted. For example, sprinkler irrigation is claimed, but the aerial photograph shows a portion of the POU being flooded. Remember the claim should accurately reflect pre-1973 practices.

The review is intended to determine whether the claimed type of irrigation was practiced before 1973, and whether all types of irrigation that appear on the data sources have been claimed.

Generally the claimed type of irrigation system will be accepted. The type of irrigation system shall be standardized on the examination worksheet to one of the following types of system types.

D	water spreading
F	flood
S	sprinkler
N	natural subirrigation
L	controlled subirrigation
O	natural overflow
E	sprinkler/flood
X	other (Use a purpose-PU-remark code to describe)

Changing Claimed Type Of Irrigation System. The claimed type of irrigation system will not be changed during the examination unless

- amended by the claimant
- clarified by the department
- standardized by the department to one of the above consistent categories

If the claimed type of irrigation system is standardized so the decree abstract will differ from the claim form or amendment, note the change by placing an asterisk on the worksheet in the brackets to the left of the purpose heading. Document the basis for the change in the claim file.

If review of the claim finds a different type of irrigation occurring than was claimed, such as flood to sprinkler or sprinkler to flood, the claimed type can only be changed by an amendment.

For claims where an incidental type of irrigation is also being claimed, add a remark to the decree abstract.

Example: P556 PU01THIS WATER RIGHT ALSO INCLUDES NATURAL SUBIRRIGATION AS AN INCIDENTAL TYPE OF IRRIGATION.

Any unique aspects or features of the type of system should be remarked.

Example: P560 PU01SUBIRRIGATION CONTROLLED BY CHECK DAM LOCATED ON DRAIN DITCH.

3. Type Of Irrigation System Issues. Any pertinent issues discovered during the examination may be identified on the department's examination report using a purpose (PU) remark.

a. No Type Of System Claimed. If no type was checked on the claim form, check the accompanying documentation for an indication of the type of system. If the documentation identifies a type, correct the worksheet accordingly.

When no type of system is indicated on the claim form or in the submitted documentation, contact the claimant.

If no type is obtained through claimant contact, try to identify the type of system from the available data sources. If the issue cannot be resolved, add a purpose (PU) remark to the department's examination report.

Example: P695 PU51NO TYPE OF IRRIGATION SYSTEM HAS BEEN CLAIMED. THE TYPE OF HISTORICAL IRRIGATION APPEARS TO HAVE BEEN A FLOOD SYSTEM.

b. Type Of Irrigation Unconfirmed. If from review of the data sources it is apparent the claimed type of irrigation system is incorrect (e.g., system claimed is present or future rather than historical), or has never been used, the claimant should be contacted. If contact is inconclusive, add a purpose remark to the department's examination report.

Examples: P697 PU51THE TYPE OF IRRIGATION SYSTEM CANNOT BE CONFIRMED. IT IS UNCLEAR IF THIS RIGHT SHOULD BE DEFINED BY FLOW RATE OR VOLUME.

P700 PU51THE TYPE OF IRRIGATION SYSTEM CANNOT BE CONFIRMED. USDA AERIAL PHOTOGRAPH NO. 999-111, DATED 08/31/78, SHOWS FLOOD IRRIGATION.

**** PU51THE TYPE OF IRRIGATION SYSTEM CANNOT BE CONFIRMED. THE 1976 USGS TOPOGRAPHIC MAP "VANDALIA" INDICATES THE EXISTENCE OF A WATER SPREADING SYSTEM.

**** PU51THE TYPE OF IRRIGATION SYSTEM CANNOT BE CONFIRMED. THE GARFIELD COUNTY WATER RESOURCES SURVEY (1959) INDICATES A FLOOD SYSTEM.

c. Priority Date Of A Sprinkler System Predates 1955. See "Claim Examination: Priority Date" for examination procedures.

B. FLOW RATE

The flow rate is the rate at which water has been appropriated from the source. The flow rate will be decreed in cubic feet per second (cfs) or gallons per minute (gpm). See "General Procedures: Standard Measurement of Water" for standard units and conversions.

1. Identifying The Claimed Flow Rate. Using the information in the claim file, check the flow rate on the claim form for clerical errors by the claimant, and for consistency with the documentation.

The flow rate units should be checked for agreement with the documentation and for correct conversion. If incorrect units have been claimed but the claim file documentation indicates the correct units, the correction can be made on the worksheet. When unsure of the intended flow rate units, contact the claimant.

For claims involving formerly decreed rights, the flow rate on the claim form and worksheet should not exceed the decreed flow rate as documented. For filed and use rights, claimed flow rates and documentation that do not match will not be considered in conflict. If what the claimant intended to claim is unclear, the claimant should be contacted.

Runoff. During the filing period, some claimants wrote "runoff" on their claim forms to describe the flow rate. Typically this was done for intermittent (non-perennial flowing) sources to describe why no specific flow rate was claimed. The term may have been added as a remark by the department during clarification as "FR01RUNOFF". This remark is no longer needed and should be deleted during examination.

Flow Rate Units Standardization. Flow rates will be converted into standard units as follows:

- less than one cfs will be automatically converted into units of gallons per minute by the computer;
- equal to or greater than one cfs will be manually standardized to units of gallons per minute or cubic feet per second to best suit the system, or the customary reference for the means of diversion, area, or claimant. No conversions will be applied by the computer.

When the units of measurement are manually changed, add a checkmark to the worksheet to alert the coders.

Flow Rate Figure Too Large for Data Base. The computer record has space allotted for flow rates up to 99,999.99 cfs. If a flow rate to be decreed is greater than the space available, write "99,999.99 cfs" on the examination worksheet and add the following remark to the decree abstract indicating the correct flow rate.

Example: F40 FR01COMPUTER RECORD CAPACITY FOR FLOW RATE FILLED.
FLOW RATE IS 186,699.00 CFS.

2. Examining Flow Rate. The claimed flow rate will be reviewed by system type, using the information in the claim file, a general flow rate guideline, and information gained through claimant contact. The flow rate area of the examination worksheet provides a comparison statistic of gallons per minute per acre (gpm/acre) claimed.

Specific procedures for reviewing flow rates are given below by system type. For claimed flow rates that will be decreed, there are two underlying considerations that should be kept in mind. First, has the claimed flow rate actually been diverted? Second, is the claimed flow rate reasonable for the specific purpose? If the answer to either question is no, further information should be pursued to determine what is reasonable and accurate. This thought process should form the basis for examining all claims.

Flow rates for claims to lawn and garden use (LG) should be examined using the domestic use guidelines.

A history and description of the development of the flow rate guideline is in the Appendix as Exhibit VII-1.

Unique Features or Aspects. Any unique aspects or features of the flow rate may also be remarked using a flow rate (FR) remark, e.g. FR01.

a. Changing Flow Rate. The claimed flow rate will not be changed during the examination unless:

- amended by the claimant;
- clarified by the department (see part 1 above);
- to standardize units of measure (see part 1 above);
- to apply standards (see part 3 below).

When the claimed flow rate is changed so that the decree abstract will differ from the claim form or amendment, denote the change by placing an asterisk between the brackets in the left margin of the worksheet next to the change.

b. Claimant Contact. For the system types that will receive a flow rate in the decree, claimant contact may be required. In conjunction with the review criteria in this subchapter, the claimant should also be contacted whenever the claimed flow rate is unclear, has apparent discrepancies, or appears unreasonable. This contact can have several outcomes.

- Information discussed confirms the claimed flow rate. Document the information supporting the claimed flow rate.
- A flow rate different from that claimed is substantiated which the claimant wishes to have replace the claimed

data. The claim can be changed by an amendment from the claimant. Document the information used to substantiate the new data.

- If the issue is unresolved, e.g., pump data is insufficient to confirm the claimed flow rate, add a flow rate issue remark to the department's examination report.

3. Flow Rate Criteria - Decreed Rights. This section contains guidelines to be used as benchmarks for reviewing the flow rate of claims based on formally decreed rights. This section is made up of the following parts:

- a. Systems Involving Reservoirs
- b. Water Spreading Systems
- c. Subirrigation And Natural Overflow
- d. Pumps
- e. Gravity Flow Pipelines
- f. Ditches And Canals

For claims based on formally decreed rights where a flow rate has been specified, the flow rate will be decreed as claimed or amended.

When the claimed flow rate on a single claim is equal to or less than the original decree, the claimed flow rate will generally be accepted but may be reviewed further if there is an apparent error or conflicting data.

For claimed flow rates greater than 33.7 gpm/acre (3 MI/acre), the computer will add the following remark to the department's examination report.

FR51THE CLAIMED FLOW RATE EXCEEDS THE 17 GPM PER ACRE GUIDELINE AND CANNOT BE CONFIRMED DUE TO LACK OF DATA. THE FLOW RATE EQUALS 62.80 GPM PER ACRE.

If the claimed flow rate is substantiated through information in the claim file or from information obtained through claimant contact, and is above the 33.7 gpm/acre guideline, add a "KEEP" flag to the worksheet which will suppress the computer generated remark. Information sufficient to support the claimed flow rate includes ditch measurements, pump information, or water commissioner records on file at the county district court. In addition, flow rates exceeding the guideline for small acreage are acceptable to a reasonable limit.

a. Systems Involving Reservoirs.

Onstream Reservoirs. When the claim and original decree both specify a flow rate, the flow rate will be decreed as claimed or amended. Since courts usually quantify reservoir rights by volume, the decreed flow rate may indicate the reservoir was constructed

after the decree. A date of construction should be pursued. See "Claim Examination: Reservoirs: Reservoir Issues".

When both the claim and original decree do not specify a flow rate, use the procedures under "Filed And Use Rights: Systems Involving Reservoirs" below.

For other variations of claimed and formally decreed flow rates involving onstream reservoirs, see "Flow Rate Issues: Specific Decreed Flow Rate Issues".

Offstream Reservoirs. When the claim and original decree both specify a flow rate, the flow rate will be decreed as claimed or amended.

To review a claimed flow rate involving an offstream reservoir which appears in error, conflicts with information in the claim file, or exceeds 17 gpm/acre, use the procedures under "Filed And Use Rights: Systems Involving Reservoirs" below.

For other variations of claimed and formally decreed flow rates involving offstream reservoirs, see "Flow Rate Issues: Specific Decreed Flow Rate Issues".

b. Water Spreading Systems. When the claim and original decree both specify a flow rate, the flow rate will be decreed as claimed or amended.

When both the claim and original decree do not specify a flow rate, use the procedures under "Filed And Use Rights: Water Spreading Systems" below.

For other variations of claimed and formally decreed flow rates, see "Flow Rate Issues: Specific Decreed Flow Rate Issues".

c. Subirrigation And Natural Overflow. When the claim and original decree both specify a flow rate, the flow rate will be decreed as claimed or amended.

When both the claim and original decree do not specify a flow rate, use the procedures under "Filed And Use Rights: Subirrigation And Natural Overflow" below.

For other variations of claimed and formally decreed flow rates, see "Flow Rate Issues: Specific Decreed Flow Rate Issues".

d. Pumps. When the claim and original decree both specify a flow rate, the flow rate will be decreed as claimed or amended. For other variations of claimed and formally decreed flow rates, see "Flow Rate Issues: Specific Decreed Flow Rate Issues".

To review a claimed flow rate involving a pump which appears in error, conflicts with pump data in the claim file (such as the pump

rate at Means of Diversion), or exceeds 17 gpm/acre, use the procedures under "Filed And Use Rights: Pumps" below.

e. Gravity Flow Pipelines. When the claim and original decree both specify a flow rate, the flow rate will be decreed as claimed or amended. For other variations of claimed and formally decreed flow rates, see "Flow Rate Issues: Specific Decreed Flow Rate Issues".

To review a claimed flow rate involving a gravity flow pipeline which appears in error, conflicts with pump data in the claim file (such as the pump rate at Means of Diversion), or exceeds 17 gpm/acre, use the procedures under "Filed And Use Rights: Gravity Flow Pipelines" below.

f. Ditches And Canals. When the claim and original decree both specify a flow rate, the flow rate will be decreed as claimed or amended. For other variations of claimed and formally decreed flow rates, see "Flow Rate Issues: Specific Decreed Flow Rate Issues".

Decreed flow rates greater than 33.7 gpm/acre involving ditches and canals will generally only have the FR51 remark shown above listed. If specific ditch capacity data are available, the claimed flow rate should be reviewed using the procedures under "Filed And Use Rights: Ditches And Canals" below.

4. Flow Rate Criteria - Filed And Use Rights. This section contains guidelines to be used as benchmarks for reviewing the flow rate of claims based on filed and use rights. This section is made up of the following parts:

- a. Systems Involving Reservoirs
- b. Water Spreading Systems
- c. Subirrigation And Natural Overflow
- d. Pumps
- e. Gravity Flow Pipelines
- f. Ditches And Canals

For filed or use rights, the flow rate guideline is 17 gpm/acre. Claimed flow rates below this guideline are generally accepted but may be reviewed further if there is an apparent error or conflicting data.

The flow rate for these claims will be reviewed according to the procedures discussed below. After the claims have been examined, the computer will compare the claimed flow rate of each claim to the 17 gpm/acre guideline. Claimed flow rates that exceed the guideline will be reduced to the guideline by the computer, unless there is a "KEEP" flag accompanying the flow rate. When the computer reduces a flow rate it will add the following remark and an asterisk to the flow rate on the decree abstract.

FR01THE FLOW RATE OF THIS WATER RIGHT HAS BEEN REDUCED TO THE 17 GPM PER ACRE GUIDELINE. THE FLOW RATE MAY BE CONTESTED BY PROPER OBJECTION.

a. Systems Involving Reservoirs.

Onstream Reservoirs. A flow rate will not be decreed. Change the claimed flow rate to zero (0.00) and add an asterisk in the margin of the worksheet. The computer will add the following flow rate remark to the decree abstract.

NO FLOW RATE HAS BEEN DECREED FOR THIS USE FROM THIS ONSTREAM RESERVOIR.

(NOTE: This remark will not be stored in the computer.)

A flow rate will be decreed for irrigation claims which use other than stored water, such as direct flow diversions upstream from a reservoir or a small reservoir as part of a large direct flow system (e.g., 0.4 AF reservoir for 20 acres of irrigation).

One method to determine if an irrigation claim uses other than stored water from the reservoir, is to compare the claimed volume to a calculated volume based on claimed acres times the appropriate climatic area volume guideline. Using the smaller of the two volume values, compare to the capacity of the reservoir. If the volume is greater than 2 times the capacity of the reservoir, the claim could be considered primarily a direct flow irrigation system.

When determining a possible direct flow system, be aware of supplemental right relationships. A small reservoir claim as part of a large system may utilize stored water to supplement other water rights and therefore may not be a direct flow system.

Claimant contact may be necessary to understand the relationship between the reservoir, the irrigation system, the claimed volume, and claims which may be supplemental. When it is determined that storage is a minimal part of the amount used, retain the claimed flow rate and add a flow rate remark to the department's examination report.

Example: F41 FR01PRIMARILY A DIRECT FLOW SYSTEM; FLOW RATE RETAINED.

Offstream Reservoirs. The guideline for offstream reservoir irrigation claims where control of the reservoir is part of the right is the capacity of the diversion and conveyance system.

Compare the claimed flow rate to information in the claim file and other data for information identifying the capacity of the diversion and conveyance system. Information identifying the diversion or conveyance capacity should be used in completing the

reservoir worksheet and a copy placed in the file. When there is no information regarding the capacity of the diversion and conveyance system, compare the claimed flow rate to the 17 gpm/acre guideline.

If the claimed flow rate exceeds the appropriate capacity figure for the diversion and conveyance system, or the 17 gpm/acre guideline when diversion and conveyance capacity are unknown, contact the claimant. The reservoir questionnaire and cover letter (Exhibits VI-6 and IV-8) should be used. This contact can have one of several outcomes.

- Submitted reservoir data confirms claimed flow rate. Add a "KEEP" flag to the claimed flow rate on the examination worksheet if it exceeds the 17 gpm/acre guideline.
- Data about the diversion and conveyance system clearly indicates an actual flow rate less than the claimed flow rate. Pursue further contact with the claimant. When the claimed flow rate is not amended to the actual flow rate, add a "KEEP" flag to the claimed flow rate on the worksheet. Add a flow rate remark to the department's examination report.

Examples: F120 FR51THE CLAIMED FLOW RATE EXCEEDS THE CAPACITY OF THE DIVERSION AND CONVEYANCE SYSTEM WHICH IS 1.80 CFS.

F135 FR51THE CLAIMED FLOW RATE APPEARS TO EXCEED THE CAPACITY OF THE DIVERSION AND CONVEYANCE FACILITIES.

F145 FR51THE CLAIMED FLOW RATE APPEARS TO EXCEED THE CAPACITY OF THE DIVERSION AND CONVEYANCE SYSTEM. AVAILABLE DATA SUPPORT A FLOW RATE OF 2.50 CFS.

- Reservoir data is insufficient to confirm a flow rate. Additional claimant contact may be pursued. A field investigation may be conducted. When reservoir data cannot be obtained and the claimed flow rate exceeds 17 gpm/acre, the claimed flow rate for filed and use rights will be reduced to the guideline by the computer. The claimed flow rate for decreed rights will not be reduced by the computer.

b. Water Spreading Systems. A flow rate will not be decreed for direct flow water spreading systems. Change the claimed flow rate to zero (0.00) and place an asterisk in the margin of the worksheet. The computer will add the following flow rate remark to the decree abstract.

NO RATE HAS BEEN DECREED BECAUSE THIS USE CONSISTS OF DIRECT FLOW WATER SPREADING.

(NOTE: This remark will not be stored in the computer.)

Water Spreading Systems Involving Reservoirs. See "Systems Involving Reservoirs" above.

Water Spreading Systems Involving Pumps. In these situations a flow rate will be decreed. See "Pumps" below for examination procedures.

c. Subirrigation And Natural Overflow.

Natural Subirrigation. A flow rate will not be decreed. Change the claimed flow rate to zero (0.00) and place an asterisk in the margin of the worksheet. The computer will add the following flow rate remark to the decree abstract.

NO FLOW RATE HAS BEEN DECREED FOR THIS USE OF NATURAL SUBIRRIGATION.

(NOTE: This remark will not be stored in the computer.)

Controlled Subirrigation. Where subirrigation is controlled by systems such as drain ditches equipped with check dams, a flow rate will be decreed. In reviewing such systems, use the appropriate criteria for the means of control, e.g., ditches or pumps.

Natural Overflow. A flow rate will not be decreed. Change the claimed flow rate to zero (0.00) and place an asterisk in the margin of the worksheet. The computer will add the following flow rate remark to the decree abstract.

NO FLOW RATE HAS BEEN DECREED FOR THIS NATURAL OVERFLOW METHOD OF IRRIGATION.

(NOTE: This remark will not be stored in the computer.)

d. Pumps. The output (flow rate) of a pump is limited primarily by the horsepower of the driving unit, vertical lift, operating pressure, and friction.

If the claim file contains sufficient pump data, Exhibit VII-2 can be used to check the accuracy of a claimed flow rate. Remember that the flow rates in this exhibit are estimates based on generalized assumptions.

When a claimed flow rate appears in error, conflicts with pump data in the claim file (such as the pump rate at Means of Diversion), or exceeds the 17 gpm per acre guideline, and there is insufficient information in the claim file to substantiate the claimed flow rate, a "Request for Pump Information" questionnaire (Exhibit VII-3) should be pursued. The preferred approach would be a personal or telephone interview. Another approach is to send the questionnaire along with a cover letter (Exhibit IV-8) to the claimant. This contact can have one of several outcomes.

- Pump data confirms the claimed flow rate. Place a "KEEP" flag on the claimed flow rate if it exceeds the 17 gpm/acre guideline.

- Data about the pump clearly indicates an actual pumping rate less than the claimed flow rate. Pursue further contact with the claimant. When the claimed flow rate is not amended to the actual pumping rate, the two most likely outcomes are:

(i) If the claimed flow rate is less than 17 gpm/acre, add a flow rate remark to the department's examination report.

Example: F150 FR51THE CLAIMED FLOW RATE APPEARS TO EXCEED THE PUMP CAPACITY. AVAILABLE DATA SUPPORT A FLOW RATE OF 98.50 GPM.

(ii) If the claimed flow rate is greater than 17 gpm/acre, add a "KEEP" flag to the flow rate on the worksheet and add a flow rate remark (shown above) to the department's examination report.

- No documentation is submitted or submitted pump data is insufficient to confirm a flow rate. Additional claimant contact may be pursued. A field investigation may be conducted. When pump data cannot be obtained and the claimed flow rate exceeds 17 gpm/acre, the claimed flow rate for filed and use rights will be reduced to the guideline by the computer.

The claimed flow rate for decreed rights will not be reduced by the computer. If the flow rate is greater than 33.7 gpm/acre (3 MI/acre), the computer will add a remark to the department's examination report.

e. Gravity Flow Pipelines. The output (flow rate) of a gravity flow pipeline system is limited primarily by pipe type, pipe length, pipe diameter, vertical drop, and friction.

Charts in Exhibit VII-4 can be used to check the claimed flow rate of these systems. The pipe diameter, pipe length, and vertical drop must be known. Assuming these three variables can be determined, the estimated flow rate from the charts can be compared to the claimed flow rate. The flow rates estimated in the charts assume PVC (plastic) pipe is used. If the claimant uses aluminum, concrete, or steel pipe, the estimates in the chart will be a bit high, but should still be used. If data sources are available which are clear, accurate and of sufficient scale, an estimated pipe output can be calculated. Be aware that it is easy to be incorrect using this check.

- Pipe length can sometimes be estimated from the claimant's map.
- Contour lines on a topographic map can be used to estimate vertical drop.

- Pipe diameter must be known from the claim file or claimant contact.

When the claimed flow rate for the gravity flow pipeline system appears in error, conflicts with pipeline data in the claim file, or exceeds the 17 gpm/acre guideline, and there is insufficient information in the claim file to substantiate the claimed flow rate, a "Request for Gravity Flow Pipeline Information" questionnaire (Exhibit VII-5) should be pursued. The preferred approach would be a personal or telephone interview. Another approach is to send the questionnaire along with a cover letter (Exhibit IV-8) to the claimant. This contact can have one of several outcomes.

- Submitted pipeline data confirms claimed flow rate. Place a "KEEP" flag on the claimed flow rate if it exceeds the 17 gpm/acre guideline.
- Data about the pipeline clearly indicates an actual flow rate less than the claimed flow rate. Pursue further contact with the claimant. When the claimed flow rate is not amended to the actual pipe output, the two most likely outcomes are:

(i) If the claimed flow rate is less than 17 gpm/acre, add a flow rate remark to the department's examination report.

Example: **** FR51THE CLAIMED FLOW RATE APPEARS TO EXCEED THE CAPACITY OF THE GRAVITY FLOW DELIVERY SYSTEM. THE ACTUAL FLOW RATE APPEARS TO BE 88.50 GPM.

(ii) If the claimed flow rate is greater than 17 gpm/acre, add a "KEEP" flag to the flow rate on the worksheet, and add a flow rate remark (shown above) to the department's examination report.

- No documentation is submitted or submitted pipeline data is insufficient to confirm a flow rate. Additional claimant contact may be pursued. A field investigation may be conducted. When pipeline data cannot be obtained and the claimed flow rate exceeds 17 gpm/acre, the claimed flow rate for filed and use rights will be reduced to the guideline by the computer.

The claimed flow rate for decreed rights will not be reduced by the computer. If the flow rate is greater than 33.7 gpm/acre (3 MI/acre), the computer will add a remark to the department's examination report.

f. Ditches And Canals. A ditch or canal cannot flow at a rate greater than its "design rate." A properly designed ditch or canal should provide

- velocity of flow causing neither erosion nor sedimentation

- sufficient capacity to carry the design flow
- proper hydraulic gradient or slope
- stable side slopes
- minimum initial cost and maintenance

When a claimed flow rate based on a filed or use right for a ditch or canal exceeds the 17 gpm/acre guideline, it will be reduced by the computer to the guideline. A claimed flow rate exceeding the guideline may be retained by adding a "KEEP" flag to the worksheet if information supporting an actual flow rate is obtained from the claim file, claimant contact, or other data sources such as:

- records submitted with the claim
- ditch commissioner records
- WRS data
- state project records
- Bureau of Reclamation records

Normally, the claimant will not be contacted when a claimed flow rate exceeds the guideline. The claimant may be contacted, however, if an apparent error exists, or data defining the ditch capacity are available.

When data clearly indicates a ditch capacity less than the flow rate claimed, pursue further contact with the claimant. When the claimed flow rate is not amended to the actual flow rate, one of the following two steps should be followed.

- (i) If the claimed ditch capacity is less than 17 gpm/acre, add a flow rate remark to the department's examination report.

Example: **** FR51THE CLAIMED FLOW RATE APPEARS TO EXCEED THE DITCH CAPACITY. AVAILABLE DATA SUGGEST THE DITCH CAPACITY IS 2.75 CFS.

- (ii) If the claimed ditch capacity is greater than 17 gpm/acre add a "KEEP" flag to the claimed flow rate on the worksheet, and add a flow rate remark (shown above) to the department's examination report.

5. Flow Rate Issues. Any pertinent unresolved issues remaining after the examination should be remarked on the department's examination report using a flow rate (FR) remark.

a. Specific Decreed Flow Rate Issues.

Claimed Flow Rate Greater Than Original Decree. If the claimed flow rate on a single claim is greater than the original decreed flow rate, or an apparent error exists, contact the claimant. An implied claim may be involved if the claimant uses the difference between the claimed and decreed flow rates. If the issue is unresolved, add a flow rate remark to the department's examination report.

Example: F90 FR51THE CLAIMED FLOW RATE EXCEEDS THE 150 MINER'S INCHES OF CROOKED CREEK DECREEED IN CASE NO. 0000, TETON COUNTY.

Flow Rate Claimed - No Flow Rate In Original Decree. When a claim specifies a flow rate and the original decree does not, accept the claimed flow rate and add the following remark. This may be a situation where the decree addressed certain elements of the water right other than the flow rate.

Example: F91 FR51CASE NO. 9999, MADISON COUNTY, DOES NOT SPECIFY A FLOW RATE; CLAIMED FLOW RATE RETAINED.

No Flow Rate Claimed - Flow Rate In Original Decree. When no flow rate is indicated on the claim form but the original decree does specify a flow rate, contact the claimant. If a flow rate is not provided, make sure the flow rate on the worksheet is zero (0.00) and add the following remark to the department's examination report.

Example: **** FR51CASE NO. 0000, GALLATIN COUNTY, DECREES A FLOW OF 150 MINER'S INCHES; NO FLOW RATE WAS CLAIMED.

No Flow Rate Claimed - No Flow Rate In Original Decree. For onstream reservoirs, direct flow water spreading, natural subirrigation, and natural overflow, accept the claim as submitted. No issue remark or claimant contact is necessary. Check that zero (0.00) appears in the flow rate field on the worksheet.

For flood or sprinkler systems, offstream reservoirs, pumped water spreading systems, and controlled subirrigation, make sure the flow rate on the worksheet is zero (0.00) and add the following remark to the department's examination report.

Example: F93 FR51CASE NO 9999, RAVALLI COUNTY, DOES NOT SPECIFY A FLOW RATE; NO FLOW RATE HAS BEEN CLAIMED.

Flow Rate Decreed At POU. When a claim or documentation states the flow rate was formerly decreed as measured at the POU, add a flow rate remark to the department's examination report.

Example: F95 FR51CASE NO. 0000, BLAINE COUNTY, DECREES THE FLOW RATE AS MEASURED AT THE PLACE OF USE. THE FLOW RATE AT THE POINT OF DIVERSION IS UNKNOWN.

Flow Rate To POU Ratio Low. A claim based on a formerly decreed right having a low claimed flow rate to acre ratio and not involved in a supplemental relationship may be evidence of an expanded or incrementally developed POU.

If the decree is not specific as to flow rate standard or acres, the following remark may be added to claims when acreage issue (PL) remarks are involved. The remark in this circumstance is

useful because it provides an additional indication of incremental development.

Example: F110 FR51THE LOW FLOW RATE TO ACRES RATIO FOR THIS CLAIM, 2.30 GPM/ACRE, MAY INDICATE AN EXPANSION OF THE HISTORICAL RIGHT.

If the historical decree specifically states a standard or the acres involved, and the claimed flow rate is less than 4 gpm/acre, add the following flow rate remark to the department's examination report.

Examples: **** FR51THE LOW FLOW RATE TO ACRES RATIO FOR THIS CLAIM, 2.30 GPM/ACRE, MAY INDICATE AN EXPANSION OF THE HISTORICAL RIGHT. CASE NO. 0000, GRANITE COUNTY, SPECIFICALLY DECREES A FLOW RATE OF ONE MINER'S INCH PER ACRE.

**** FR51THE LOW FLOW RATE TO ACRES RATIO FOR THIS CLAIM, 2.30 GPM/ACRE, MAY INDICATE AN EXPANSION OF THE HISTORICAL RIGHT. CASE NO. 9999, RAVALLI COUNTY, SPECIFICALLY DECREES 90.00 ACRES TO THIS RIGHT.

b. Claimed Flow Rate Not Numerically Quantified.

Where a flow rate is to be decreed and the claim states the flow rate as "All" or a portion of "All" (e.g., " $\frac{1}{2}$ of ALL"), the following procedures apply.

- For formerly decreed rights, check that the flow rate is expressed as "0.00 KEEP" and add a flow rate remark to the decree abstract to identify the claimed flow rate.

Examples: F45 FR01ENTIRE FLOW OF THE SOURCE AS DECREED IN CASE NO. 0000, TOOLE COUNTY.

F50 FR01THIS RIGHT IS FOR ONE FOURTH THE FLOW OF BEAVER CREEK AS DECREED IN CASE NO. 0000, BEAVERHEAD COUNTY.

For filed and use rights where a flow rate is to be decreed, contact the claimant. If an amendment is not submitted, check that the flow rate is expressed as "0.00 KEEP". Add a flow rate remark to the decree abstract.

Example: F56 FR01ENTIRE/ONE FOURTH THE FLOW OF CLEAR CREEK.

AND

- Add a flow rate issue remark to the department's examination report.

Example: F170 FR51THE FLOW RATE HAS NOT BEEN EXAMINED AS NO QUANTIFIED FLOW RATE WAS CLAIMED.

Where a flow rate is to be decreed and a flow rate value has not been identified for multiple claims based on the same historic water right filed by the same claimant, add the following remark to the department's examination report for each claim involved. This remark is in lieu of the FR51 issue remark referenced above.

Example: **** FR51THE FLOW RATE HAS NOT BEEN EXAMINED AS NO QUANTIFIED FLOW RATE WAS CLAIMED. THE CLAIMS LISTED FOLLOWING THIS STATEMENT ARE ALL BASED ON THE SAME HISTORIC WATER RIGHT. W000000-00, W000000-00.

c. Undivided Interest. An undivided interest is where two or more water users have an interest in a whole unsegregated water right. The undivided interest is generally established in a deed. In an undivided interest, a water right is shared among the users in alternating or rotating use that allows each user to divert the full flow rate during their turn.

When an undivided interest is identified by the claimant on the claim form or documentation, or during examination, add a flow rate remark to the decree abstract showing the respective proportional interests.

Examples: F65 FR01UNDIVIDED 1/3 INTEREST IN A SINGLE WATER RIGHT FOR 2.50 CFS/GPM.

F75 FR01CASE NO. 9999, BROADWATER COUNTY DECREES THIS RIGHT AS AN UNDIVIDED 1/3 INTEREST IN A SINGLE WATER RIGHT FOR 2.50 CFS/GPM.

As a rotation of the water use will be occurring, all parties sharing the water right must be identified in a flow rate remark. The remark should be added to each claim listed in the remark. One method of identifying these claims is to wait until all claims in the basin have been examined and coded, and then review an index of the FR01 remarks.

Examples: F60 FR01THE WATER RIGHTS FOLLOWING THIS STATEMENT HAVE AN UNDIVIDED INTEREST IN A SINGLE WATER RIGHT FOR 2.50 CFS/GPM. W000000-00, W999999-00, W888888-00.

F76 FR01THE WATER RIGHTS FOLLOWING THIS STATEMENT HAVE AN UNDIVIDED INTEREST IN A SINGLE WATER RIGHT FOR 2.50 CFS/GPM AS DECREED IN CASE NO. 6767, BROADWATER COUNTY. W000001-00, W000002-00, W000003-00.

When all the parties in the undivided interest relationship have been identified and the combined undivided portions exceeds 1 or 100%, add the following issue remark to each claim in the undivided interest relationship.

Example: F176 FR51THE UNDIVIDED INTEREST PORTION OF THIS CLAIM MAY BE INCORRECT. THE SUM OF THE PORTIONS FOR THE CLAIMS IN THIS UNDIVIDED INTEREST EQUALS 143 %.

If all parties sharing the water right cannot be identified and the combined undivided portions are less than 1 or 100%, add the following issue remark to each claim in the undivided interest relationship.

Example: F175 FR51THE FLOW RATE MAY BE INCORRECT. ALL PARTIES IN THIS UNDIVIDED FLOW RATE INTEREST GROUP CANNOT BE IDENTIFIED. THE SUM OF THE UNDIVIDED INTEREST PORTIONS EQUALS 80 %.

An undivided interest allows each user the full flow rate on a rotating basis. Therefore, the claimed flow rates of the claims in the undivided interest relationship should be identical. If the claimed flow rates are not the same, add a flow rate remark to each claim in the undivided interest relationship.

Example: F177 FR51THE FLOW RATE OF THIS CLAIM MAY BE INCORRECT. THE PARTIES IN THIS UNDIVIDED INTEREST GROUP HAVE CLAIMED DIFFERENT FLOW RATES.

d. Maximum Acres Issue May Affect Flow Rate. If a maximum acreage issue is identified when reviewing the place of use element and a flow rate is to be decreed, add the following flow rate remark to the department's examination report.

Example: F180 FR51FLOW RATE MAY REQUIRE MODIFICATION BASED ON RESOLUTION OF MAXIMUM ACRES ISSUE.

This remark should only be added when there is no KEEP flag on the flow rate and it is determined the gpm/verified acres (using the lowest data source figure) exceeds the guideline. If, for example, the claim indicates a flow rate of 100 gpm, and the lowest number of verified acres equals 20 (5 gpm/ac), this remark is not needed.

e. Flow Rate Inadequate. Claimed flow rates that are below the guidelines will generally be accepted. In addition, a low flow rate on a claim in a supplemental relationship will generally be accepted. If, however, the claimed flow rate appears to be in error or inadequate, and is below 4 gpm/acre, the claimant may be contacted. If the issue is unresolved, add the following flow rate remark to the department's report:

Example: F185 FR51THE CLAIMED FLOW RATE APPEARS TO BE INADEQUATE FOR THE CLAIMED PURPOSE.

f. No Flow Rate Claimed. This section does not apply to formally decreed flow rates, see "Specific Flow Rate Review Criteria: Decreed Rights".

Onstream Reservoirs, Direct Flow Water Spreading, Natural Subirrigation, And Natural Overflow. Accept the claim as submitted. No issue remark or claimant contact is necessary. Check that zero (0.00) appears in the flow rate field on the worksheet.

Flood Or Sprinkler Systems, Offstream Reservoirs, Pumped Water Spreading Systems, And Controlled Subirrigation. When no flow rate is indicated on the claim form or in the documentation, contact the claimant. If necessary, a field investigation may be conducted.

If a flow rate is not provided, make sure the flow rate on the worksheet is zero (0.00) and add a "KEEP" flag. Add the following remark to the department's examination report.

Example: F190 FR51NO QUANTIFIED FLOW RATE HAS BEEN CLAIMED.

6. Recording Documentation. After a claim has been examined, the flow rate of formerly decreed rights will be recorded. No record of documentation for 62-73 groundwater developments, filed appropriations, or use rights will be maintained.

The purpose for maintaining a record of formerly decreed rights is to check that a formerly decreed right for a certain flow rate and priority date is not exceeded by claims against that right.

a. Recording. All irrigation claims that will be decreed a flow rate and are based on a formerly decreed right will be recorded. When recording the proof of use submitted with a claim in an index, the following information will be recorded:

- use code (i.e., IR, FW, CM,...)
- claim number
- claimed flow rate
- claimant

Exhibit VII-6 is an example of how documentation is to be recorded.

b. Decreed Rights Exceeded. After all the claims for a basin or subbasin have been examined, review the decree index. Identify any group of claims where the total claimed flow rate for the group exceeds the formerly decreed flow rate for that water right. Determine if one or more parties are involved.

- When only one party is involved, a total flow rate for several claims that is greater than the original decreed flow rate may be a multiple use of the right. See "Claim Examination: Purpose: Multiple Use". If not multiple use, then the formerly decreed right has been exceeded.
- When two or more parties are involved and the sum of the flow rates claimed by the parties is greater than the original decreed flow rate, the formerly decreed right has been exceeded.

Where a formerly decreed right has been exceeded, contact the parties separately. This contact may be by telephone or letter. Exhibit VII-7 is an example decree exceeded notification letter. This contact is only done as notification, not to initiate a

resolution process. In addition to notification, add a decree exceeded (DE) remark to the department's examination report.

Example: D5 DE51THE WATER RIGHTS LISTED FOLLOWING THIS STATEMENT
ARE FILED ON THE SAME FORMERLY DECREED WATER RIGHT.
THE SUM OF THE CLAIMED FLOW RATES EXCEEDS THE 150
MINER'S INCHES DECREED IN CASE NO. 9999, RAVALLI
COUNTY. W000000-00, W000000-00, W000000-00.

If the parties resolve the decree exceeded issue among themselves prior to the publication of the department's summary report, and submit amendments for the percentages to which they are entitled, remove the DE remarks.

When a single claim exceeds the original decreed flow rate, the above decree exceeded remark is not necessary. See "Flow Rate: Specific Flow Rate Review Criteria: Decreed Rights" for examination procedures.

C. VOLUME

Irrigation volume is the amount of water which has been diverted, impounded, or withdrawn from the source over the year for irrigation, and is measured in acre-feet (AF). The volume of water needed for irrigation is influenced by several factors, including crop, soil type, irrigation systems, seasonal weather, and climatic area.

Most water rights for irrigation will not be decreed a volume. The types of irrigation rights that will receive a volume are:

- rights previously decreed by volume
- water spreading systems
- systems involving reservoirs

1. Identifying The Claimed Volume. When applicable, use the information in the claim file to check that the volume on the claim form does not exhibit clerical errors by the claimant, and is apparently consistent with the documentation. If the claimed volume is unclear, the claimant may be contacted. Only initiate claimant contact if a volume is to be decreed. See "Specific Volume Review Criteria".

The volume units of measurement should be checked for agreement with the documentation, and for correct conversions.

Volume Units Standardization. Irrigation volumes that will be decreed must be expressed in acre-feet. Any such volumes not expressed in acre-feet should be converted manually and corrected on the worksheet. Add a checkmark to the worksheet to alert the coders to the change in units of measurement.

Make all conversions using the following equivalencies:

- One (1) acre-foot equals 325,851 gallons.
- One (1) acre-foot equals 12 acre-inches.

If a volume that will be decreed is in units that cannot be converted using the above formulas (e.g., "6 applications per season"), contact the claimant.

Volume Figure Too Large For Data Base. The computer record has space allotted for volumes up to 99,999.99 acre-feet. If a volume to be decreed is greater than the space available, write "99,999.99" acre-feet on the examination worksheet and add the following remark to the decree abstract indicating the correct volume.

Example: **** VM01COMPUTER RECORD CAPACITY FOR VOLUME FILLED.
CLAIMED VOLUME IS 1,600,000.00 ACRE FEET.

2. Examining Volume. For the types of irrigation rights to be decreed a volume, examine the claimed volume using the information in the claim file, information gained through claimant

contact, and the guidelines. The guidelines for specific system types are given below in "Specific Volume Review Criteria". The guidelines are based on alfalfa as the crop, a drought year growing season, system type, and climatic area.

Volumes for claims to lawn and garden use (LG) should be examined using the domestic use guidelines.

Unique Aspects Or Features. Any unique features or aspects of the volume may be denoted on the department's examination report by a volume (VM) remark, e.g. VM01.

Example: **** VM01 CASE NO. 0000, TETON COUNTY, DECREES ONE-THIRD INTEREST OF THE CEDAR LAKE STORAGE RIGHT.

a. Changing Volumes. The claimed volume will not be changed during the examination unless:

- amended by the claimant;
- clarified by the department (see section 1. above);
- to standardize units of measure (see section 1. above);
- to apply standards (see section 3. below).

When the claimed volume is changed so that the decree abstract will differ from the claim form or amendment, a notation of the change will be made by placing an asterisk in the left margin of the worksheet opposite the change.

b. Claimant Contact. For the system types that will receive a volume in the decree, claimant contact may be required. In conjunction with the review criteria in this subchapter, the claimant should also be contacted whenever the claimed volume is unclear, has apparent discrepancies, or appears unreasonable. This contact can have several outcomes.

- Information discussed confirms the claimed volume. Document the information supporting the claimed volume.
- A volume different from that claimed is substantiated which the claimant wishes to have replace the claimed data. The claim can be changed by amendment from the claimant. Document the information used to substantiate the new data.
- If the issue is unresolved, or data support an actual volume different from the one claimed, add a volume issue remark to the department's examination report.

c. Climatic Areas. A climatic area code will be stored in the computer data base for every irrigation claim. Use the 1986 climatic area map to identify the climatic area codes when examining claims. A number code has been given to each of six climatic areas. The lower the number code, the higher the

consumptive use of a crop grown in that climatic area. Reviewing the climatic area includes the following steps.

- Assign a climatic area code to each claim based on the POU location.
- Locate the POU on the 1986 map and determine the climatic area code corresponding to that location. If the POU is located in more than one climatic zone, use the climatic zone which has the larger consumptive use. If a claim is located in climatic zone 6 (mountainous area), assign either Climatic Area V or the climatic zone which is adjacent to the mountainous area.
- Complete or change the climatic area code directly on the worksheet. Place a check in the margin of the worksheet whenever the climatic area code is completed or changed to alert the coders. No asterisk is needed.

The climatic area is used in examining irrigation claims to determine volume and period of use guidelines. The climatic area code will be printed under volume on the decree abstract of each irrigation claim.

Climatic area codes were assigned to some irrigation claims as claims were being clarified for entry into the computer record system. These codes were based on the 1973 SCS Irrigation Climatic Area Map of Montana (from the SCS Montana Irrigation Guide, 1974). The 1973 SCS map has been replaced by a 1986 update. The two maps look similar, but there are many differences. Use the 1986 map to check climatic area codes when examining claims.

d. Feasibility Check. Claims that will be decreed both a flow rate and a total annual volume should be checked for feasibility. Comparison statistics under volume on the examination worksheet list the maximum volume possible if water were diverted at the claimed flow rate throughout the claimed period of use (year round use equals 366 days). Compare this figure to the claimed volume. When the claimed flow rate or period of use has been amended recalculate the maximum feasible volume figure using the following equations.

- For cfs: $\text{Feasible V} = Q \times \text{days used} \times 1.9834711$
- For gpm: $\text{Feasible V} = (Q \times \text{days used}) / 226.28542$

Contact the claimant when the claimed volume exceeds the maximum feasible volume. Flow rate, volume, and period of use should be discussed with the claimant in order to determine which is in error.

When claimant contact does not resolve the problem, the computer will add a volume remark to the department's examination report.

VM51THE CLAIMED VOLUME EXCEEDS MAXIMUM FEASIBLE VOLUME. BASED ON THE FLOW RATE AND PERIOD OF USE, THE MAXIMUM VOLUME POSSIBLE IS 3.20 ACRE-FEET PER YEAR.

3. Specific Volume Review Criteria. This section contains the criteria to be used as benchmarks for conducting department review and claimant contact. Separate subsections address the various specific guidelines, which differ depending upon the claimed type of irrigation system and type of historical right.

Claimed volumes below the guidelines are generally accepted, but may be reviewed further if there is an apparent error or conflicting data.

a. Direct Flow Systems. This section does not apply to formerly decreed volumes (see "Formerly Decreed Volumes" below). A volume will not be decreed for direct flow irrigation rights. Direct flow irrigation includes flood and sprinkler systems, subirrigation, and natural overflow. It does not include systems using stored water from reservoirs or water spreading systems. Cross out the claimed volume and write "0.00" next to the crossed out volume. Add an asterisk between the brackets to the left of the volume heading on the examination worksheet. The computer will print (but not store) the following remark on the decree abstract.

THE TOTAL VOLUME OF THE RIGHT SHALL NOT EXCEED THE AMOUNT PUT TO HISTORICAL AND BENEFICIAL USE.

b. Water Spreading Systems. This section does not apply to formerly decreed volumes (see "Formerly Decreed Volumes" below). A volume will be decreed for these system types. The volume guidelines by climatic area for water spreading systems are as follows.

<u>Climatic Area</u>	<u>AF/AC/YR Guidelines</u>
I	2.3 AF/AC
II	2.0 AF/AC
III	1.9 AF/AC
IV	1.7 AF/AC
V	1.4 AF/AC

These values were used previously as volume guidelines for irrigation systems. A history and description of their development is in the Appendix as Exhibit VII-8.

When a claimed volume based on a filed or use right for a water spreading system (irrigation type code "D") exceeds the guideline for the respective climatic area, it will be reduced to the guideline by computer, unless there is a "KEEP" flag accompanying the volume. When the computer reduces a volume, it will add the following remark (containing the appropriate guideline value) and an asterisk to the volume on the decree abstract.

VM01THE VOLUME OF THIS WATER RIGHT HAS BEEN REDUCED TO THE 1.9
ACRE-FEET PER ACRE GUIDELINE FOR WATERSPREADING. THE VOLUME
MAY BE CONTESTED BY PROPER OBJECTION.

Claims formerly decreed by volume will not have the claimed volume
reduced by the computer. See "Formerly Decreed Volume" below.

A claimed volume exceeding the guideline may be retained by
adding a "KEEP" flag to the worksheet if information supporting an
actual volume is obtained from the claim file, claimant contact, or
other data sources such as:

- records submitted with the claim
- ditch commissioner records
- WRS data
- state project records
- Bureau of Reclamation records

Normally the claimant will not be contacted when a claimed
volume simply exceeds the guideline. The claimant may be contacted,
however, if an apparent error exists, or data defining the volume
are available.

c. Systems Involving Reservoirs. This section does
not apply to formerly decreed volumes (see "Formerly Decreed
Volumes" below). The claimed volume will be decreed for irrigation
systems involving reservoirs where control of the reservoir is part
of the right. When the claimed volume is greater than 15 AF, data
will be collected and added according to the procedures in "Claim
Examination: Reservoirs."

The volume guidelines by climatic area for systems involving
reservoirs are as follows:

<u>Climatic Area</u>	<u>AF/AC/YR Guidelines</u>
I	11.4
II	10.2
III	9.4
IV	8.5
V	7.2

These values were used previously as volume guidelines for direct
flood irrigation systems. A history and description of their
development is in the Appendix as Exhibit VII-8.

When the claimed volume is 15 AF or less, it will generally be
accepted and a comment should be added to the worksheet noting the
volume was not examined. When the claimed volume is greater than 15
AF and exceeds the above values, or is greater than 2 times the
capacity of the reservoir, add issue remark(s) to the department's
examination report.

A volume will not be decreed for irrigation claims which use other than stored water, such as direct flow diversions upstream from a reservoir or a small reservoir as part of a large direct flow system (e.g., 0.4 AF reservoir for 20 acres of irrigation).

One method to determine if an irrigation claim uses other than stored water from the reservoir, is to compare the claimed volume to a calculated volume based on claimed acres times the appropriate climatic area volume guideline. Using the smaller of the two volume values, compare to the capacity of the reservoir. If the volume is greater than 2 times the capacity of the reservoir, the claim could be considered primarily a direct flow irrigation system.

When determining a possible direct flow system, be aware of supplemental right relationships. A small reservoir claim as part of a large system may utilize stored water to supplement other water rights and therefore may not be a direct flow system.

Claimant contact may be necessary to understand the relationship between the reservoir, the irrigation system, and the claimed volume. When it is determined that storage is a minimal part of the total volume used, cross out the claimed volume and write "0.00" next to the crossed out volume. Add an asterisk between the brackets to the left of the volume heading on the examination worksheet, and add a volume remark to the department's examination report.

Example: V9 VM01PRIMARILY A DIRECT FLOW SYSTEM; VOLUME NOT DECREED.

Retain the reservoir record. The computer will print (but not store) the following remark on the decree abstract.

THE TOTAL VOLUME OF THIS RIGHT SHALL NOT EXCEED THE AMOUNT PUT TO HISTORIC AND BENEFICIAL USE.

d. Formerly Decreed Volumes. In some pre-SB76 cases, water rights have been decreed a volume. A claim filed for a formerly decreed volume must have the claimed volume retained to appear on the decree abstract. Add a volume remark to the decree abstract.

Example: V10 VM01THIS VOLUME WAS PREVIOUSLY DECREED IN CASE NO. 0000, MEAGHER COUNTY.

Compare the claimed volume to the volume decreed in the submitted documentation. If the claimed amount exceeds the formerly decreed amount, contact the claimant. An implied claim may be involved if the claimant uses the difference between the claimed and decreed amounts. If the issue is unresolved, add the following volume issue remark to the department's examination report.

Example: V30 VM51THE CLAIMED VOLUME EXCEEDS THE 1,750 ACRE-FEET
DECREED IN CASE NO. 9999, PONDERA COUNTY.

Record the volumes that are based on formerly decreed water rights in the manner prescribed in "Irrigation: Flow Rate: Recording Documentation." When a historically decreed right is found to be exceeded by the combined volume of claims based on that right, add to the department's examination report a decree exceeded (DE) remark modified to refer to volume and acre-feet.

Compare claimed volume to the following table. When the claimed volume exceeds the values, add an issue remark to the department's examination report.

Climatic Area	Systems With Reservoirs AF/AC	Flood Systems Without Pumps AF/AC	Sprinkler and Pumped Systems Af/AC	Water Spreading Systems AF/AC
I	11.4	5.7	3.8	2.3
II	10.2	5.3	3.5	2.0
III	9.4	5.0	3.3	1.9
IV	8.5	4.6	3.1	1.7
V	7.2	4.4	3.0	1.4

These values were used previously as volume guidelines for all irrigation systems. A history and description of their development is in the Appendix as Exhibit VII-8.

4. Volume Issues. Any pertinent issues discovered during the examination should be remarked on the department's examination report using a volume remark.

a. Volume Excessive. When a claimed volume that will be decreed appears excessive for the circumstances of the claim (diversion and conveyance, POU, climatic area) and contact has not resolved the issue, add a remark to the department's examination report.

Examples: V35 VM51THE CLAIMED VOLUME APPEARS TO BE EXCESSIVE FOR
THE CLAIMED PURPOSE. THE CLAIMED VOLUME EQUALS 17.80
ACRE-FEET PER ACRE.

V40 VM51THE CLAIMED VOLUME APPEARS TO BE EXCESSIVE FOR
THE CLAIMED PURPOSE. THE CLAIMED VOLUME EQUALS 2.9
TIMES THE CAPACITY OF THE RESERVOIR.

b. Volume Inadequate. When a claimed volume that will be decreed appears exceptionally low, generally below 0.5 AF/AC, the claimant should be contacted. If the claimant cannot be reached or the issue is unresolved, add the following volume remark to the department's examination report.

Example: V45 VM51THE CLAIMED VOLUME APPEARS TO BE INADEQUATE FOR THE CLAIMED PURPOSE.

c. No Volume Claimed. When no volume has been claimed for a water spreading system, a system involving a reservoir, or a formerly decreed volume, contact the claimant. If an amendment identifying a volume is not submitted, check that the volume on the worksheet is expressed as "0.00", and place a "KEEP" flag next to it. Add a volume remark to the department's examination report.

Example: V50 VM51NO VOLUME HAS BEEN CLAIMED. THE VOLUME GUIDELINE FOR THIS AREA IS 2.00 ACRE-FEET PER ACRE.

For direct flow systems where a volume will not be decreed, accept the claim as submitted. No issue remark or claimant contact is necessary. Check that zero "0.00" appears in the volume field on the worksheet.

d. Maximum Acres Issue May Affect Volume. If a maximum acreage issue was identified when reviewing the place of use element and a volume is to be decreed, add the following volume remark to the department's examination report.

Example: V55 VM51VOLUME MAY REQUIRE MODIFICATION BASED ON RESOLUTION OF MAXIMUM ACRES ISSUE.

This remark should only be added when it is determined the volume/verified acres (using the lowest data source figure) exceeds the guideline. For example, if a claim which involves a reservoir indicates a volume of 100 acre-feet (Climatic Area 3), and the lowest number of verified acres equals 20 (5 acre-feet/ac), this remark is not needed.

e. Claimed Volume Not Numerically Quantified. When a claimed volume for a water spreading system, systems involving a reservoir, or a formerly decreed volume states "All" or a portion of "All" (e.g., " $\frac{1}{2}$ of ALL"), the following procedures apply.

- For formerly decreed rights, check that the volume is expressed at "0.00 KEEP" and add a volume remark to the decree abstract to identify the claimed volume.

Examples: V11 VM01ENTIRE VOLUME OF THE SOURCE AS DECREED IN CASE NO. 0000, TOOLE COUNTY.

V12 VM01THIS RIGHT IS FOR ONE FOURTH THE VOLUME OF BEAVER CREEK AS DECREED IN CASE NO. 0000, BEAVERHEAD COUNTY.

For filed and use rights where a volume is to be decreed, contact the claimant. If an amendment is not submitted, check that the volume is expressed as "0.00 KEEP" and add a volume remark to the decree abstract.

Example: V13 VM01ENTIRE/ONE FOURTH THE VOLUME OF CLEAR CREEK.

AND

- Add a volume issue remark to the department's examination report.

Example: V96 VM51THE VOLUME HAS NOT BEEN EXAMINED AS NO QUANTIFIED VOLUME WAS CLAIMED.

D. PLACE OF USE (POU)

An irrigation place of use (POU) is the land to which water is applied. The POU is defined by a legal land description and an acreage figure. The size of the POU relates closely to the amount of water claimed for an irrigation water right. As a result, the examination of the POU is a very important part of the overall analysis of an irrigation claim.

The claimant was supposed to support the POU on the claim by submitting a map of the POD, conveyance, and POU (§85-2-224(2) MCA).

The review of the claimed POU for an irrigation claim has two phases. First, identify the claimed POU and, when necessary, clarify it to make it clear and consistent with the claim file. Second, examine the claimed information for consistency with outside data sources. Both phases may require claimant contact. Generally, if the first phase requires contact, pursue the second phase for a better understanding of the claim prior to contact.

1. Identifying The Claimed Place Of Use. Using just the information in the claim file, check the acreage and location of the claimed POU. The POU on the claim form and the claimant's map should agree.

If the claimant's map is unclear, for example the POU is not outlined, contact the claimant. If contact does not resolve the issue, add the following remark to the department's examination report.

Example: P305 PL51THE CLAIMED PLACE OF USE AND ACRES IRRIGATED
COULD NOT BE IDENTIFIED FROM DATA SUBMITTED WITH THE
CLAIM.

Acreage. On the worksheet, compare the maximum acres figure with the sum of the individual claimed parcels for agreement. The maximum acres figure is the total keypunched directly from the claim form whereas the sum of the individual claimed parcels is a computer generated total. When a difference between the maximum acres and total parcel acres exist, check the arithmetic, claimant's map, and aerial photograph.

Legal Land Description. Compare the claimed parcel land descriptions to the claimant's map. The map and claimed parcels should agree. Many water right claimants were not familiar with legal land descriptions. One result of this lack of familiarity is a large number of inaccurate and/or overly general descriptions of claimed places of use.

The data base allows for the addition of a fourth $\frac{1}{4}$ section breakdown to a legal land description. This should only be done when the claimant's map or the data sources are extremely precise, or the claim indicates a fourth $\frac{1}{4}$ description. POUs in highly subdivided areas or a townsite could warrant a fourth $\frac{1}{4}$ description.

Check whether the POU involves a subdivision, government lot, certificate of survey, etc. See "Claim Examination: Additional Legal Land Descriptions" for processing instructions.

a. Adjusting Claimed Acreage Or Legal Land Descriptions. The degree to which acreage or legal land descriptions can be adjusted without benefit of claimant contact depends on the quality of the claimant's map, and outside data sources (plat books, aerial photos, realty transfer certificates, etc.). The claimant's intent must be clearly established by their map or other information in the claim file, preferably both.

- Simple arithmetic errors in acreage may be corrected and parcel acreage may be adjusted without claimant contact. If an acreage discrepancy is not simple arithmetic or parcel adjustment, contact the claimant. A downward or upward change to the total acreage stated on the claim form which involves more than a simple arithmetic error may only be made by an amendment.
- Adjustments to the claimed legal land description may be made without claimant contact. If the legal land description cannot be refined or adjusted with certainty, contact the claimant. If the claimant cannot be contacted, adjust the legal description only to the extent possible with certainty, given the information available.

Make adjustments to the claimed POU directly on the worksheet or by attaching a POU code sheet. Explain adjustments to the claimed acreage or legal land descriptions in the comments section on the worksheet. If the POU acreage or legal land descriptions are changed so that they will be different on the decree abstract from the claim form, place an asterisk in the left column on the worksheet next to the Place of Use heading.

Acreage Errors. There are numerous reasons why the claimed parcel acres and maximum acres may need adjustment, such as

- parcel listed twice
- parcel omitted
- acres too high or too low for land description
- arithmetic errors

For example, a claim is encountered where the claimed acreage figures do not match the claimant's map. The claimed place of use is described as

32 acres	NW SW
18 acres	SW SW
<u>10 acres</u>	SE SW NW
60 acres total	

The claimant's map and department data sources clearly depict the following:

38 acres	NW SW
18 acres	SW SW
<u>4 acres</u>	SE SW NW
60 acres total	

The place of use acreage should be adjusted if no apparent possibility of conflict in ownership exists.

Legal Land Description Errors. Numerous reasons exist why the claimed legal land descriptions may need correcting or refining, such as

- duplicated parcels
- missing parcels
- backwards legals
- incorrect legals
- overly general or overly specific legals

For example, a 10 acre parcel might have been described by the claimant as lying within the NW $\frac{1}{4}$ of Section 26, etc. This legal land description might be revised to more precisely define the POU in several different ways, depending on the information in the claim file as confirmed by other available data sources.

Solution 1: 10 acres SW NW

Solution 2: 7 acres SE SW NW
3 acres SW SW NW

In some instances, a claimant may list a larger claimed acreage than the associated, overly specific, legal land description can accommodate. For example 150 acres in NW $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 26, etc. In this example, review the claimant's map and other data sources to identify the place of use. If the claimant's map provides an obvious solution that is confirmed by other data, the legal and the associated acreage should be adjusted. The legal land description could be broken into smaller parcels, or the legal description could be made more general.

Solution 1: 80 acres S2 SW
40 acres NE SW
30 acres NW SW

Solution 2: 150 acres SW

b. Changing Claimant Contact Points. If the total acreage figure is changed as a result of identifying the claimed POU, the claimant contact points must also be changed. The claimant contact points are listed below Place of Use for Irrigation on the examination worksheet. Calculate the new claimant contact points using the following equations:

$$C_p = X - 0.8(X^{0.6})$$

$$C_p = X + 0.8(X^{0.6})$$

where X = new total claimed acres
 C_p = new claimant contact point

Document the new claimant contact points by writing them on the worksheet.

2. Examining Place Of Use. Once the claimed POU has been properly identified, review the POU to confirm the accuracy and existence of the irrigated acres, and the accuracy of the legal land descriptions. Variance between the claimed POU and examined POU may only be changed upon clear, documented instructions from the claimant or by an amendment.

a. Data Sources. The POU indicated on the claim and worksheet will be compared with various data sources. These data sources include

- USDA aerial photographs taken between 1975 and 1980
- USGS orthophotoquads
- USGS topographic maps
- Water Resources Survey data and materials

Although topographic maps do not provide a pictorial representation of the POU, they do provide important evidence about slope and the feasibility of irrigating from the source claimed. This information is not easily interpreted on aerial photographs. Also, topographic maps occasionally depict conveyance ditches and spreader dike systems.

The Water Resource Survey data and materials were compiled for most counties by the Montana Water Conservation Board in the 1940's through 1960's. These data and materials consist of field notes, published books, 2" per mile (or greater) mylar maps, and 2" per mile (or greater) aerial photographs. The maps in the published survey books are 1" per mile and may be too small to make precise acreage calculations. The 2" per mile mylar maps, in addition to showing areas under irrigation at the time of the survey, also depict historically irrigated acres (not under irrigation at the time of the survey). Any of the above materials may be used as WRS data.

Field investigations may become a source of data when facts and issues cannot be resolved by other data sources, including claimant contact. See "Examination Materials and Procedures: Investigation Techniques."

b. POU Data Source Review. Use two data sources to determine whether the claimed acreage is actually irrigated. The principal data sources used in this review are the 1975-80 USDA aerial photographs and the WRS data listed above. By comparing the

claim and worksheet to each of these sources, and the sources to each other, an analysis of the changes in POU over time can be made.

Using two data sources, one earlier than the other, illustrates the changes taking place over time such as significant acreage taken out of or put into production between the two data source dates. For example, if the WRS data indicate that 50 of the claimed acres were irrigated in 1968, but a 1978 photo shows only 20 acres being irrigated, a nonuse issue may exist. Similarly, if the WRS shows 20 irrigated acres, but a 1978 photo shows 50 irrigated acres, an incremental development issue might exist.

Two data sources may not always be available for certain areas or for claims with recent priority dates. In these situations only one data source will be used and the fact noted on the worksheet. A 1970 priority date, for example, postdates the WRS data for most counties. Since the late priority date makes pre-1973 incremental development or nonuse less likely, the lack of a second data source is not likely to result in a deficient examination. If there is reason to believe an issue exists, however, contact the claimant. Post-1973 changes in irrigated acreage are subject to the Montana Water Use Act, not the water court adjudication.

In many situations, the data sources may not show evidence of present irrigation, but will indicate that irrigation may have occurred historically. Procedures for handling historically (vs. presently) irrigated acreage are outlined in "Place of Use Issues" section below.

Also determine whether all acres that appear irrigated are actually served by the claimed source and conveyance system; the acres might be served by a different source or conveyance system. Care should be taken to avoid crediting an active irrigation system with naturally subirrigated acres. Natural subirrigation sometimes resembles full service irrigation on an aerial photograph.

Claimed Acres 2.50 Or Less. Acreage totals of 2.5 acres or less are presumed to be valid. The claimant should only be contacted if a data source (e.g., county plat) clearly contradicts the claim. Aerial photographs are generally not effective tools for reviewing small acreage. Note on the examination worksheet "POU not examined due to size."

Claimed Acres 2.51 - 5.00. Compare claims of 2.51 to 5.00 acres with an aerial photographs for evidence of irrigation and to see if the claimed acreage appears correct. Contact the claimant only if the aerial photographs clearly contradicts the claimed acreage.

c. Data Source Criteria. For each claimed POU parcel, review both of the two principal data sources for evidence that the claimed acreage was being irrigated at the time the data source was compiled.

Flood Irrigation Or Flood/Sprinkler Irrigation. The following are the examination criteria for present flood irrigation or flood/sprinkler irrigation. A claimed parcel needs to meet only one of the criteria to confirm claimed acres.

- The 1975-80 USDA aerial photograph must show a definite shade contrast indicating irrigation when compared to nonirrigated lands in the vicinity. Also, evidence of a supply ditch from the claimed source must show on the photo. In a floodplain or areas with a high water table, this criteria may require a liberal interpretation.
- The 1975-80 USDA aerial photograph must show some evidence of the irrigation system. Do not count areas of brush and trees unless claimant contact supports irrigation in such areas. Do not count roads and buildings. Evidence must include:
 - i) main supply ditch from the claimed source,
 - ii) lateral spreader ditches, or some system of controlled water spreading, and
 - iii) clearly defined field boundaries, especially on the downslope side of the field.
- WRS materials indicate irrigation.

Sprinkler Irrigation. The following are the examination criteria for present sprinkler irrigation. A claimed parcel needs to meet only one of the criteria to confirm claimed acres.

- The 1975-80 USDA aerial photograph must show some evidence of the irrigation system, such as conveyance ditches from the claimed source, holding ponds, irrigation wells, pump houses, wheel lines, surface or buried mainlines, and center pivots. A definite irrigated field boundary must be determinable.
- The 1975-80 USDA aerial photograph must show a definite shade contrast indicating irrigation when compared to nonirrigated lands in the vicinity. A definite irrigated field boundary must be determined. A conveyance system from the claimed source should show on the aerial photograph or must be clearly illustrated on the claim map.

These criteria are not always valid in areas with a high water table. Most fields irrigated by wheel lines are rectangular in shape but some fields have irregular ends that are covered with handlines. Fields irrigated by center pivots are round, generally, but some cover corners with end guns or handlines. Acreage claimed under traveling gun sprinklers can be difficult to identify. Few traveling guns were used before 1975. Some traveling boom sprinklers (rotating booms) were installed from about

1969 to 1974, but they irrigated limited amounts of acreage and were limited to less than 4% slope.

- WRS materials indicate irrigation.

Subirrigation And Natural Overflow. The following are the examination criteria for present subirrigation or natural overflow. A claimed parcel needs to meet only one of the criteria to confirm claimed acres.

- The USGS topographic map must confirm the claimed boundaries as being feasible. The claimed POU must be approximately at the same contour (elevation) as the source.
- The 1975-80 USDA aerial photograph must show a definite shade contrast when compared to nonirrigated lands in the vicinity. Because of dry years or time of year photographs were taken, there may not be evidence of subirrigation or natural overflow over the entire area.
- WRS information indicates subirrigation or natural overflow.

The WRS usually does not indicate areas of subirrigation or natural overflow. A remark will not be added to denote the WRS data unless the area is specifically documented in the survey and disagrees significantly with the claimed acreage.

d. Recording Data Source Results. The POU section of the worksheet provides space to record the results of examining the two separate data sources. Record the titles and dates of the principal data sources on the examination worksheet.

Record the presently irrigated acres from each data source on the blank parcel record spaces at data source #1 and data source #2 on the worksheet. Each data source area has one space per corresponding claimed parcel. For example, a POU of twelve parcels will have twelve spaces under data source #1 and twelve spaces under data source #2.

Examination Worksheet POU Addendum. If additional space is needed to record POU examination results, use the POU Examination Worksheet Addendum, Exhibit VII-9. This form can be used to document the examination of a refined, amended, or alternative POU. Whenever an addendum is used, refer to it in the examination worksheet POU comments area. It is suggested the entire POU be placed on the addendum to reduce confusion.

e. Analyzing Claimed and Data Source Acreage Totals. After listing on the worksheet the presently irrigated acres found on the principal data sources, compare the acreage totals to the claimant contact points listed on the worksheet below "Place of Use for Irrigation."

Claimant Contact Points. The claimant contact points listed on the examination worksheet are based on the logarithmic equations shown in "Changing Claimant Contact Points" above and on Exhibit VII-10 which contains a scale illustrating the contact points. The contact points allow for photograph distortion and reviewer interpretation error. These contact points indicate the minimum discrepancy between claimed and data source acreage totals requiring claimant contact. Be sure the contact points have been revised to reflect any adjustments made to the claimed acreage total. See "Changing Claimant Contact Points" above.

Comparing Data Source Totals To Claimant Contact Points. Compare each of the two principal data source acreage totals with the claimant contact points. If either of the acreage totals is outside the range defined by the contact points, the claimant must be contacted.

f. Changing Claimed Place Of Use. The claimed POU will not be changed during the examination unless:

- amended by the claimant;
- clarified upon instructions from the claimant (see section 1. above);
- clarified by the department to the nearest reasonable and concise legal land description (see section 1. above).

When the claimed POU is changed so that the decree abstract will differ from the claim form, addendum, or amendment, a notation of the change will be made by placing an asterisk in the brackets at the left margin of the worksheet next to the POU heading.

3. Specific POU Acreage Guidelines. The following are guidelines to situations encountered in examining POU acreage. These specific situations are

- a. Both sources within range
- b. Both sources or only aerial photograph below range
- c. Only WRS below or above range
- d. Both sources or only aerial photograph above range
- e. Discretionary contact

These situations include most possible outcomes to the POU review. For each situation described below, a general course of action is described. The claimed acreage may be changed by an amendment.

a. Both Sources Within Range. Both principal data source acreage totals lie within the claimant contact point range. Furthermore, the claimed acreage does not present any discrepancies that may require discretionary claimant contact.

Example: Claimed = 100 [contact points: 87-113]
Data Source Totals: WRS = 98, USDA = 95
Action: no claimant contact needed, no acreage
issue remarks added.

b. Both Sources Or Only Aerial Photograph Below Range. When just the USDA aerial photograph total or both of the principal data source acreage totals lie below the claimant contact point range, claimant contact is required.

Examples: (1) Claimed = 100 [contact points: 87-113]
Data Source Totals: WRS = 70, USDA = 83

(2) Claimed = 100 [contact points = 87-113]
Data Source Totals: WRS = 89, USDA = 83

Review both data sources with the claimant to understand the issue. In addition, describe the adjudication process (examination, report, decrees, objections, etc.), and how the issue would be identified in the department's examination report. Do not attempt to persuade the claimant to alter the claim, just outline the options available. If necessary, a field investigation may be scheduled and conducted.

Possible resolutions include:

- The claimed acres are confirmed. Document the data or evidence supporting the claimed acreage.
- The claimant amends the claimed acres to within the contact range of both data sources. Review flow rate and volume.
- The claimant amends the claimed acres to a figure matching the higher of the two data source totals (e.g. USDA figure in example 1 above). The lower data source acreage is below the claimant contact range of the amended acreage (e.g., WRS figure in example 1 above) and nothing is found to contradict the lower data source. Inform the claimant of the unresolved issue and add the appropriate (PL) issue remark. Review flow rate and volume.
- The claimant amends the claimed acres to some other amount that is confirmed based on facts or observable data, i.e., another data source. Document the new data. Review flow rate and volume.
- The claimant amends the claimed acreage to a figure other than either data source total. Examine the amended total using newly calculated contact point range. If the data source totals are within the new contact point range, the issue is resolved. If either data source is outside the new contact point range, inform the claimant of the

unresolved issue and add the appropriate (PL) issue remark(s). Review the flow rate and volume.

When a claimant chooses to alter claimed acreage, check the claimed flow rate and volume (if it will be decreed). If either is above the guideline for the amended acres, review the flow rate and volume with the claimant.

If claimant contact is inconclusive and the acres issue is unresolved, add the appropriate place of use (PL) issue remark(s) to the department's examination report. Add the flow rate remark (and volume remark if appropriate) to identify the relationship between POU and flow rate (or volume).

Examples: P235 PL51THE MINERAL COUNTY WATER RESOURCES SURVEY (1969) APPEARS TO INDICATE 86.00 ACRES IRRIGATED. A DESCRIPTION OF THESE ACRES IS IN THE CLAIM FILE.

P240 PL51THE MINERAL COUNTY WATER RESOURCES SURVEY (1969) APPEARS TO INDICATE 0.00 ACRES IRRIGATED.

P270 PL51USDA AERIAL PHOTOGRAPH NO(S). 378-201, 179-108, DATED 08/29/78, 09/10/79, APPEARS TO INDICATE 84.00 ACRES IRRIGATED. A DESCRIPTION OF THESE ACRES IS IN THE CLAIM FILE.

P271 PL51USDA AERIAL PHOTOGRAPH NO. 179-108, DATED 08/02/79, APPEARS TO INDICATE 0.00 ACRES IRRIGATED.

F180 FR51FLOW RATE MAY REQUIRE MODIFICATION BASED ON RESOLUTION OF MAXIMUM ACRES ISSUE.

V55 VM51VOLUME MAY REQUIRE MODIFICATION BASED ON RESOLUTION OF MAXIMUM ACRES ISSUE.

c. Only WRS Below Or Above Range. When the acreage total identified in WRS materials is either above or below the claimant contact point range, claimant contact is required.

Examples: (1) Claimed = 100 [contact points: 87-113]
Data Source Totals: WRS = 70, USDA = 95

(2) Claimed = 100 [contact points = 87-113]
Data Source Totals: WRS = 138, USDA = 95

Contact can be made in either of two ways.

- Send a letter (Exhibit VII-11) notifying the claimant of the discrepancy and our report to the water courts. This reduces the time spent on the WRS information which sometimes cannot be supported or disputed. At the same time, the letter allows the claimant to provide additional information supporting the claimed acreage or to amend the claim. If letter contact is inconclusive, no further

contact regarding this issue is required. Add a place of use issue remark to the department's examination report as shown in section 3.b. above.

- If circumstances or available information warrant it, an interview can be set up for the claimant to review and discuss the claim and data sources. Follow the procedures in 3.b. above.

d. Both Sources Or Only Aerial Photograph Above Range. When the aerial photograph or both of the principal data source totals are above the claimant contact point range, claimant contact is required.

Example: Claimed = 100 [contact points = 87-113]
Data Source Totals: WRS = 108, USDA = 115

Before contacting the claimant, review the claimant's claims and post-1973 rights, and the data sources for the following explanations.

- Unclaimed irrigated ground that appears on aerial photograph may be covered by a post-1973 water use permit.
- Unclaimed irrigated ground is irrigated from a different source, and part of a different water right.
- Unclaimed acreage is subirrigated.

If any one of these explanations is confirmed by a data source, the claimed acreage can be accepted and claimant contact is not necessary.

When claimant contact is initiated, follow the procedures in section 3.b. above.

e. Discretionary Contact. Whenever a claim raises questions concerning the POU which could be resolved or more clearly understood by contacting the claimant, do so. For example, if for 100 acres of irrigation claimed, 89 were identified on both data sources. Neither data source total lies below the claimant contact point range; but, the claimed acreage appears incorrect, and both data sources appear to be accurate. Claimant contact is optional.

Example: Claimed = 100 [contact points = 87-113]
Data Source: WRS = 89, USDA = 89

If the claimant is contacted, follow the procedures in section 3.b. above.

Discretionary claimant contact might also be appropriate when claim examination clearly reveals an incremental development issue, even though the difference between the two standard data sources is small. For example, the WRS shows 100 irrigated acres, and the

later aerial photograph shows 112. Although the later acreage figure is within the contact point range of 87-113, the option of contacting the claimant is available if it is clear this is the expansion of a historic flood right onto adjacent bench land through the installation of a pump/sprinkler system.

4. Place Of Use Issues. In addition to the issues discussed in "Specific POU Acreage Guidelines", i.e., claimed acres too high, claimed acres too low, incremental development, and prolonged nonuse, other issues are encountered concerning the place of use. This section contains guidelines for the following situations.

- a. Historically Irrigated Acres
- b. Overlapping POUs On Claims By Different Owners
- c. Claims By Individuals Where The POU Is Located On State Or Federal Lands
- d. POU Not Irrigable By Source Claimed
- e. Claims To Irrigation District Rights Filed By Individuals
- f. Place Of Use Not In Montana
- g. Post-June 30, 1973 Change Not In Accordance With §85-2-402, MCA

If unresolved, denote these issues with place of use (PL) issue remarks in the department's examination report.

a. Historically Irrigated Acres. POUs may be encountered that do not appear on the data sources as irrigated at the time the data was compiled, but which may have been historically irrigated. Such acreage would not meet the guidelines in "Data Source Criteria". Evidence that acreage was historically irrigated can come from several sources including the following.

- The WRS original mylars. Some of these are color coded for active and historical irrigation. They also show ditch systems not in use at the time of survey.
- The WRS field notes. Some notes identify the last year a parcel was irrigated. Most regional offices have the WRS field notes on microfilm.
- WRS or USDA aerial photographs. Evidence of diversions, ditches, dikes, orchards, etc., are sometimes visible on aerial photographs, even when no irrigation is presently occurring. This is particularly true for irrigation systems such as spreader dikes.
- Claimant interviews. Statements by claimants describing claimed acreage as historical without some supporting physical evidence are not sufficient proof that a parcel was historically irrigated.

- Field investigations. Vestiges of old systems, or crops are frequently found during field investigations.

Contact the claimant based on the lack of presently irrigated acres on the data source as interpreted using the review criteria in Section 2.c. Address the issue of historically irrigated acres. When evidence of historic irrigation is found, address at least two questions: How many acres were historically irrigated? When were they last irrigated?

- If the claimant identifies the POU as historically irrigated and that is corroborated by additional evidence, information from the interview may be accepted as proof of historical irrigation. "Additional evidence" may include information from the claimant concerning historical irrigation practices which gives a different perspective or interpretation of the data sources. Report the acres identified in the appropriate data source area of the examination worksheet. Document all statements and evidence supporting the historical irrigation. Base any issue remarks on the acreage identified as historically irrigated.
- If the claimant does not identify the acreage as historically irrigated, or there is insufficient evidence to corroborate the statement that it was historically irrigated, follow the relevant procedures in section 3. above.

Add place of use (PL) issue remarks to the department's examination report regarding the historically irrigated acres. Some example remarks are listed below. Additional remarks may need to be developed to match particular situations. All such remarks should be discussed with the water resources specialist, then sent to the program manager to ensure standardization between regional offices.

Examples: P230 PL51A FIELD INVESTIGATION CONDUCTED ON 07/01/86 FOUND REMNANTS OF A DITCH SERVING THE CLAIMED PLACE OF USE. TOTAL HISTORICALLY IRRIGATED ACRES AND LAST YEAR OF OPERATION WERE NOT DETERMINABLE. SEE CLAIM FILE FOR ADDITIONAL INFORMATION.

P255 PL51THE GRANITE COUNTY WATER RESOURCES SURVEY (1959) INDICATES AN ADDITIONAL 150.00 ACRES MAY HAVE BEEN IRRIGATED PRIOR TO THE SURVEY. THE ACREAGE WAS NOT BEING IRRIGATED AT THE TIME OF THE SURVEY.

P260 PL51THE GRANITE COUNTY WATER RESOURCES SURVEY (1959) APPEARS TO INDICATE 90.00 ACRES IRRIGATED AT THE TIME OF THE SURVEY, PLUS ANOTHER 40.00 ACRES AS HAVING BEEN IRRIGATED PRIOR TO THE SURVEY.

P275 PL51USDA AERIAL PHOTOGRAPH NO. 479-3, DATED 09/10/78, INDICATES AN ADDITIONAL 25.00 ACRES MAY HAVE BEEN IRRIGATED PRIOR TO 1978. THE ACREAGE WAS NOT IRRIGATED IN 1978.

P280 PL51USDA AERIAL PHOTOGRAPH NO. 178-44, DATED 08/29/78, SHOWS EVIDENCE OF A SPREADER DIKE SYSTEM. THE SOURCE OF WATER IS AN INTERMITTENT STREAM. THE SYSTEM VISIBLE ON THE PHOTOGRAPH APPEARS CAPABLE OF IRRIGATING 90.00 ACRES WHEN WATER IS AVAILABLE.

P290 PL51ACCORDING TO INFORMATION IN THE CLAIM FILE, THE PLACE OF USE WAS FIRST/LAST IRRIGATED IN 1952.

P291 PL51ACCORDING TO INFORMATION IN THE CLAIM FILE, AN EXPANSION IN THE NUMBER OF IRRIGATED ACRES HAS TAKEN PLACE. MORE THAN ONE WATER RIGHT MAY BE INVOLVED.

b. Overlapping POU's On Claims By Different Owners.

When recording the POU on aerial photograph overlays, overlapping POU's by different owners may be encountered.

Following are situations where an overlapping issue may not be involved.

- A claim filed by a private individual which overlaps the POU of a ditch company or other water supply organization is not considered an overlapping issue.
- The relationship of the owners is husband/wife, parents/siblings, corporation/individual, etc. This would need to be confirmed with the claimants. If there is no overlapping issue, these claims should be identified in a supplemental rights relationship. See "Irrigation: Place of Use: Supplemental Rights."

The overlap may be due to imprecise maps and legals provided by the claimant, or a mapping error by the examiner. Make certain the claimants correctly depicted their POU's. Heavily subdivided areas require precise mapping, and maps used by many claimants were not adequate to distinguish small adjacent parcels. If claimed POU legals can be clarified to correct an ambiguous situation, see "Adjusting Claimed Acreage Or Legal Land Description" above.

It may be helpful to check county plat books to determine exactly what properties are owned by each claimant.

Overlapping POU's may be from both buyer and seller filing claims. If duplicate claims are involved, one party (typically the seller) may decide to withdraw their claims. If the claimants filed on a different water right for the same parcel (i.e., different sources, priority dates, etc), it may be advisable to add or delete owners to each claim by means of transfers.

When needed changes to the claimed POU go beyond clarification, contact the claimants and attempt to arrange a meeting at which all claimants can be present. If claimant contact cannot be made, or the parties do not resolve the overlapping issue, add the following ownership remark to the department's examination report for all the claims involved.

Example: O60 OW51THE WATER RIGHTS LISTED FOLLOWING THIS STATEMENT WERE FILED BY DIFFERENT PARTIES WHO CLAIM OVERLAPPING PLACES OF USE. W000000-00, W999999-00.

c. Claims By Individuals Where The POU Is Located On State Or Federal Land. When a claimed POU appears from data sources to be located entirely or partially on state or federal land, add an ownership remark to the department's examination report. In addition, document on the examination worksheet the data source (BLM Land Status map, etc.) used to make this determination.

Examples: O65 OW51THE OWNERSHIP OF THIS RIGHT MAY BE QUESTIONABLE. THE PLACE OF USE APPEARS TO BE ON STATE LAND.

O70 OW51THE OWNERSHIP OF THIS RIGHT MAY BE QUESTIONABLE. PART OF THE PLACE OF USE APPEARS TO BE ON FEDERAL LAND.

O85 OW51PRAIRIE COUNTY RECORDS AS OF MM/DD/YY SHOWS PLACE OF USE IS OWNED BY USA (DEPT OF INTERIOR BUREAU OF LAND MGMT).

If the claim filed by an individual is duplicated by a state or federal claim, also add the following remark to the department's examination report.

Example: D95 DU51THIS CLAIM APPEARS TO DUPLICATE CLAIM NO. W000000-00 FILED BY THE BUREAU OF LAND MANAGEMENT.

d. POU Not Irrigated By Source Claimed. Data sources may show a claimed POU cannot be irrigated by the source claimed.

When this situation appears to exist, review all the claimant's claims and the data sources to be certain a POD or conveyance has not been overlooked. If clarification cannot resolve the situation, contact the claimant. If the issue remains unresolved, add a place of use remark to the department's examination report.

Examples: P295 PL51THE CLAIMED PLACE OF USE DOES NOT APPEAR TO BE IRRIGATED BY WATER FROM THE CLAIMED SOURCE.

P300 PL51PART OF THE CLAIMED PLACE OF USE DOES NOT APPEAR TO BE IRRIGATED BY WATER FROM THE CLAIMED SOURCE.

P301 PL51PART OF THE CLAIMED PLACE OF USE MAY BE QUESTIONABLE. IT DOES NOT APPEAR THE PLACE OF USE ALONG GREYSON CREEK AND DEEP CREEK ABOVE THE BROADWATER-MISSOURI EAST SIDE CANAL CAN BE IRRIGATED FROM THE CLAIMED SOURCE.

e. Claims To Irrigation District Rights Filed By Individuals. Occasionally individuals filed claims for water rights which duplicate or are shares in water supply organization claims. When it is apparent from the claim form or documentation that an individual has filed on the same water right as the water supplier claim (e.g., claimant mentions "15 shares" on claim form, or documentation contains a contract or certificate for shares), contact the claimant.

If the duplication is confirmed, the claimant may withdraw the claim. If the issue is unresolved, add the following remark to the department's examination report.

Example: D95 DU51THIS CLAIM APPEARS TO DUPLICATE CLAIM NO. W000000-00 FILED BY THE NORTH CHINOOK IRRIGATION ASSOCIATION.

f. Place Of Use Not In Montana. If all or a portion of the place of use is in another state, the POU must be described with a place of use (PL) remark on the decree abstract as other states' principal meridians are different from Montana's. In addition, add an issue remark to the department's examination report.

Examples: **** PL01PLACE OF USE IS IN SW SEC 2 TWP 20N RGE 21E LEMHI COUNTY IDAHO.

P310 PL51AN INTERSTATE USE OF WATER IS CLAIMED. PLACE OF USE IS IN IDAHO.

g. Claimed POU Reflects A Post-June 30, 1973 Change. When a claimed POU includes a change made after June 30, 1973, the issue must be addressed. Post-June 30, 1973 changes can be discovered during claimant contact or a field investigation, or from information submitted with the claim. Follow the procedures in "Special Provisions: Change in Appropriation Right".

5. Recording Place Of Use. The place of use for irrigation claims is recorded because (1) it gives a pictorial view of supplemental rights; (2) it shows irrigated land claimed by unrelated owners; and (3) it gives the accurate location of the area verified by the reviewer.

Map the claimed POU acreage on acetate overlaying the USDA aerial photograph. In addition, map the acreage identified on the USDA aerial photograph as presently irrigated, if different from that claimed. Historically irrigated parcels not meeting the guidelines in "Data Source Criteria" should also be recorded on the

overlay, and identified with the historic irrigation code letters (HI).

Due to the scale of the aerial photographs, less than 2.5 acres need not be mapped. If it becomes necessary to map small POUs, several possibilities exist, for example

- obtain county subdivision plat maps,
- obtain larger scale aerals.

Water supply organizations should be plotted if the rights are appurtenant to a specified place of use. The claimed acreage of an irrigation district formed under Title 85, Chapter 7, MCA need not be mapped.

Clearly mark section corners, section numbers, and photograph roll and exposure numbers on the overlays. Use colored pencils or acetate marking pens to depict POU boundaries. Use different colors to visually distinguish individual rights on the overlays.

For small parcels where the claim number (possibly six digits) will not fit within the POU boundary, label the parcel one (1) through ninety-nine (99). In the margin of the overlay, write the numeric code followed by the claim number.

After the POU has been recorded, mark the front of the claim folder (___X___ place of use recorded).

E. SUPPLEMENTAL RIGHTS

Supplemental rights occur when a claimed place of use of a water right overlaps the claimed place of use on another water right having the same purpose and ownership.

Supplemental rights involving irrigation districts created under Title 85, Chapter 7, MCA are discussed in "Irrigation: Claims Filed on Irrigation District Forms." Supplemental rights for other uses claims are processed according to "Other Uses: Place of Use."

1. Identifying Supplemental Rights. Review the places of use for all irrigation claims of one ownership for supplemental rights. Irrigation districts and other water supply organizations are not considered supplemental to claims submitted by individual water users.

Supplemental rights are identified by reviewing the POU's of an ownership on the aerial photograph overlays (see section VII.F.5.). Use the overlays to determine all rights within an ownership which overlap in any way. To be considered supplemental, they can overlap entirely or in part. They may also be supplemental by overlapping in series, i.e., A overlaps B which overlaps C, even though A and C do not touch.

Use the claimed acres outlined on the mylar overlays to determine supplemental rights, not the confirmed acres. Record the number of confirmed supplemental acres on the comments area of the examination worksheet. This information may prove useful if acreage issues are later resolved.

If overlapping claims have different owners, they are not supplemental. See "Irrigation: Place of Use: Overlapping POU."

2. Recording Supplemental Rights On Examination Worksheet. The examination worksheet has a supplemental rights line to be completed by the reviewer.

SUPPLEMENTAL ____ Yes (add supplemental rights addendum) ____ No

The information on the Supplemental Rights Worksheet Addendum (Figure VII-1) is used to identify supplemental claims together in the temporary preliminary, preliminary, and final decrees.

To properly complete the supplemental rights addendum, use the following steps:

- Leave the 'Claim No.' in the upper right hand corner blank.
- The 'Max Combined Acres' figure is required. This figure must include the total acreage of the entire area claimed on all supplemental rights, even though only a portion of

Claim No. _____

Max. Combined Acres: _____

Reference Right: _____

Supplemental
Water Rights: _____

(_____ continued on next page)

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those lands may be overlapping. When summing parcel acreage, areas which overlap should be counted only once.

- Complete the 'Reference Right' line with the lowest ID number in the group of supplemental rights.
- Complete the 'Supplemental Water Rights' lines with the ID numbers of each of the remaining rights in the supplemental group.
- The two columns next to the ID # column can be used to record data associated to each individual water right, such as the total number of acres, flow rate, etc.
- Make sufficient copies of the form and complete the 'Claim No.' in the upper right hand corner. Add one copy to each file.

The supplemental rights area on examination worksheets printed prior to October, 1991, were formatted with the following statement:

If ref right, max combined acres for all rights ____.

If supp. right, claim ID ____ of reference right.

If supplemental rights are involved, this statement should be crossed-off and "See Supplemental Rights Addendum" written above it.

3. Supplemental Rights Issues.

a. Excessive Flow Rates. When supplemental flow rates total more than 60 gpm/ac, the claimant may be contacted to discuss whether all the rights are used, or were ever perfected. Questions to consider are (1) Was an additional ditch constructed, or an existing one extended for the junior rights? (2) Was the capacity of an existing ditch increased? (3) Were there changes in use or appropriations of additional water?

If all of the supplemental rights are not accounted for by answers to such questions, there may be nonperfected rights in the group. If so, add a remark to the department's examination report on each claim in the supplemental rights relationship. This remark should only be added when it is determined the gpm/acre of all supplemental rights total more than 60 gpm/acre. These figures are determined by adding the flow rates of the supplemental rights and dividing the total by the maximum combined acres.

When filed or use rights are involved and the claimed flow rates will be reduced by the computer, the combined flow rate in the remark should be that of the reduced flow rates. Furthermore, document the effect any maximum acres issues may have on the combined flow rate on supplemental rights.

Examples: S140 SR51THE COMBINED CLAIMED FLOW RATE FOR THIS GROUP OF SUPPLEMENTAL RIGHTS IS 69.50 GPM PER ACRE. THE FLOW RATE GUIDELINE FOR INDIVIDUAL CLAIMS IS 17 GPM PER ACRE.

**** SR51THE COMBINED CLAIMED FLOW RATE FOR THIS GROUP OF SUPPLEMENTAL RIGHTS IS 50 CFS WHICH APPEARS TO EXCEED THE CAPACITY OF THE MACMILLAN DITCH. THE CARBON COUNTY WATER RESOURCES SURVEY (1943) INDICATE THE DITCH CAPACITY TO BE 35 CFS.

b. Excessive Volumes. When supplemental volumes total more than twice the guideline for waterspreading systems or more than twice the capacity of the reservoir involved, the claimant may be contacted. Questions to consider are (1) Was the capacity of the reservoir increased? (2) Were there changes in use of appropriation of additional water? i.e. Does the volume on each claim reflect the total amount of water appropriated or the additional amount of water diverted above and beyond that which was appropriated prior to the enlargement?

If all of the supplemental rights are not accounted for by answers to such questions, there may be nonperfected rights in the group. If so, add a remark to the department's examination report on each claim in the supplemental rights relationship. This remark should only be added when it is determined the acre-feet per acre of all supplemental rights total more than twice the waterspreading guideline or more than twice the capacity of the reservoir. The figure for waterspreading systems can be determined by adding the volumes of the supplemental rights and dividing the total by the maximum combined acres.

When filed or use rights are involved and the claimed volume will be reduced by the computer, the combined volume in the remark should be that of the reduced volume. Furthermore, document the effect any maximum acres issues may have on the combined volume on supplemental rights.

Examples: S141 SR51THE COMBINED CLAIMED VOLUME FOR THIS GROUP OF SUPPLEMENTAL RIGHTS IS 17.90 ACRE-FEET PER ACRE. THE VOLUME GUIDELINE FOR INDIVIDUAL CLAIMS IS 1.90 ACRE- FEET PER ACRE.

S146 SR51THE COMBINED CLAIMED VOLUME FOR THIS GROUP OF SUPPLEMENTAL RIGHTS IS 200 ACRE- FEET WHICH APPEARS TO EXCEED THE CAPACITY OF MACMILLAN RESERVOIR. ACCORDING TO INFORMATION IN THE CLAIM FILE, THE MAXIMUM STORAGE CAPACITY IS 35 ACRE- FEET.

c. Multiple Claims From Same Source. When supplemental claims exist from the same source which irrigate primarily the same POU (75% or greater overlap), this may indicate that certain claims have not been perfected, or may be duplicate or

redundant. The claimant should be contacted to discuss whether all the rights are used, or were ever perfected when:

- the supplemental flow rate totals more than 60 gpm/ac, or
- the supplemental volume totals more than twice the guideline, or
- two or more of the rights are from the same source with the same priority date, or
- the combined flow rate of the supplemental rights exceeds the ditch capacity.

When the issue is unresolved, and it appears certain claims have not been perfected, add a supplemental rights (SR) remark to the department's examination report on each claim in the supplemental rights relationship. See above example remarks.

If it appears duplicate or redundant claims have been submitted, also add the appropriate remark to the examination report for all claims involved.

Examples: D85 DU51THIS CLAIM APPEARS TO BE DUPLICATED BY CLAIM NO. W000000-00 WHICH IS BASED ON THE SAME FILED APPROPRIATION RIGHT. IT APPEARS ONLY ONE WATER RIGHT IS INVOLVED.

D93 DU51CLAIM NOS. W000000-00 AND W000000-00 MAY BE REDUNDANT CLAIMS ON THE SAME HISTORIC APPROPRIATION OF WATER. IT APPEARS THAT ONLY ONE WATER RIGHT IS INVOLVED.

d. Maximum Acres In Doubt. For those claims listed in a supplemental relationship where the claimed acres have been questioned in a place of use issue remark, add the following remark to the department's examination report.

Example: S150 SR51THE MAXIMUM COMBINED ACRES FOR THIS GROUP OF SUPPLEMENTAL CLAIMS MAY REQUIRE MODIFICATION PENDING RESOLUTION OF MAXIMUM IRRIGATED ACRES ISSUE.

The above remark is not necessary when the group of supplemental claims involves an irrigation district, or other uses claims as the supplemental rights remark for these situations contain no acres reference.

If known, document the apparently correct maximum acres figure on the worksheet of the reference right. Also document any effect this may have on combined flow rates.

4. Supplemental Rights Remark. When the information from the supplemental rights worksheet addendum is entered into the data base, the computer will use the information to add a

supplemental rights remark to the temporary preliminary, preliminary, and final decree. The supplemental rights remark will be printed on the decree abstract of each claim that is supplemental. The text for the remark is:

THE WATER RIGHTS FOLLOWING THIS STATEMENT ARE SUPPLEMENTAL WHICH MEANS THE RIGHTS HAVE OVERLAPPING PLACES OF USE. THE RIGHTS CAN BE COMBINED TO IRRIGATE ONLY OVERLAPPING PARCELS OF THE CLAIMANT'S TOTAL 99999.99 ACRES. EACH RIGHT IS LIMITED TO THE FLOW RATE AND PLACE OF USE OF THAT INDIVIDUAL RIGHT. THE SUM TOTAL VOLUME OF THESE WATER RIGHTS SHALL NOT EXCEED THE AMOUNT PUT TO HISTORICAL AND BENEFICIAL USE.
W000000-00, W000000-00, W000000-00, W000000-00.

F. CLAIMS FILED ON IRRIGATION DISTRICT FORMS

This section addresses claims submitted on Irrigation District forms, or claims filed by irrigation districts on a standard irrigation form. Usually these claims are filed by an institution or a company. The following types of claimants may be included in this group

- Federal Projects
- State Projects
- Public Service Corporations
- Mutual Irrigation Companies
- Water Companies
- Water User Associations
- Municipal Water Companies
- Drainage Districts
- Conservation Districts
- Corporations, Partnerships, or Trusts (with several rights)
- Individuals (with several rights)

Add information to the claim file that exists in the regional office which pertains to the claim. This could be information from the Water Resources Survey, State Water Conservation Projects Manual, the USDI-BOR Water Conservation Opportunities Study, a file maintained by the regional office on the district, delivery records, diversion records, assessment records, organization's charter, etc. Identify this information by using the department supplemental document stamp.

1. Irrigation District Form. The irrigation district form differs from the standard irrigation, domestic, stock, or other use claim forms in that several water rights from one source for the same place of use are identified on one form. The intent of the form is to allow lengthy POU descriptions to be listed only once for several rights. The form has not been limited to irrigation districts, but has been used by various claimants for many claimed purposes.

Examine claims filed on irrigation district forms according to the rules governing the purpose identified.

2. Identifying An Irrigation District. Determine whether an entity filing an irrigation district claim form for the purpose of irrigation is an irrigation district created under Title 85, Chapter 7, MCA.

Review the claim form and documentation for evidence of incorporation under the requirements of §§85-7-101 through 110. See Exhibit VII-13 for a list of irrigation districts which has been compiled by the department's engineering bureau.

Generally, any entity filing an irrigation district claim form that has the appearance of an irrigation district should be contacted, unless the order establishing the district is in the

claim file. When contacting the district, request a copy of the court order creating the district for the file.

If doubt exists whether a claimant is an irrigation district under Title 85, Chapter 7, MCA, send the claim file, including all relevant materials, to the program manager for review.

In its summary report to the water court, the department will identify irrigation districts created under Title 85, Chapter 7, MCA. Add the following owner remark to the department's examination report.

Example: O25 OW01THIS IRRIGATION DISTRICT WAS ESTABLISHED UNDER TITLE 85, CHAPTER 7, MCA.

State Project Claims. Certain state project claims are based on rights originally filed by the State Water Conservation Board (SWCB) pursuant to 89-121 RCM 1947. These department claims, can be identified by the Notice of Appropriation, which is in the name of the SWCB, and which references the statute. If there is any doubt, contact the claimant. When a right based on this statute is identified, add a remark to the department's examination report.

Example: O30 OW01THIS WATER RIGHT WAS ESTABLISHED PURSUANT TO 89-101 THROUGH 89-141 R.C.M. (1947) (REPEALED).

When a state project claim is based on a private right acquired by the state, add the following owner remark to the department's examination report.

Example: O31 OW01THIS WATER RIGHT WAS ORIGINALLY PERFECTED BY PRIVATE OWNERSHIP AND LATER COMBINED WITH WATER RIGHTS ESTABLISHED PURSUANT TO 89-101 THROUGH 89-141 R.C.M. (1947) (REPEALED).

3. Worksheet And Decree Information. Claims filed on irrigation district forms which identify more than one water right are stored in the computer in two parts. The irrigation district form itself has a "Z" identification number, and each water right listed on the irrigation district form has a "W" ID number. If there is only one water right listed on the irrigation district form, only a "W" ID number is assigned.

When more than one water right is listed on the irrigation district claim form, a worksheet will be printed for the "Z" number and each "W" number. The "Z" worksheet will show the total combined flow rate, volume, and place of use for the water rights. The "W" worksheet will normally list everything for that individual right except the place of use. If there is only one water right listed in the irrigation district form, all information will appear on the "W" worksheet (a "Z" worksheet will not be printed).

a. "Z" Numbers. A "Z" number is not a water right. To avoid confusing the public, the "Z" abstract will be suppressed

from the decrees. "Z" abstracts were included in decrees issued prior to August, 1984; however, these will be suppressed from future decrees.

To relate "W" rights to the "Z" file, add a general (RM) remark to each "W" claim listed on the irrigation district claim form.

Example: R5 RM01PARENT FILE FOR THIS RIGHT IS Z000000-00.

This remark or one like it may have been added during clarification for entry into the computer data base. If so, correct it to the above format as necessary.

The remark will only appear on internally generated abstracts, indexes, and worksheets. It will not appear on the decree abstracts.

b. POU Data Distribution. Since the "Z" abstracts will not be appearing in the decrees, the POU will have to be associated with the "W" abstracts. There are several alternatives for doing this which are:

- The POU can be added to each "W" file. To do this, add a photocopy of the "Z" worksheet to each "W" file. The POU can be transferred automatically by the records section. Indicate to records section the need to transfer the POU from the "Z" abstract to each "W" abstract by stating so in the POU area of every pertinent "W" abstract.

In some cases, separate "W" rights can be associated to specific POUs within the total area claimed. If so, list and review the POU by the individual right associated with it. Claimant contact may be helpful or necessary.

- When an irrigation POU land description seems too long to repeat on every "W" abstract, add a photocopy of the "Z" worksheet to only the lowest numbered "W" abstract.

Indicate to records section the need to transfer the POU from the "Z" abstract to this "W" abstract by stating so in the POU area of the abstract. Add the following place of use (PL) remark to the decree abstract of the remaining "W" abstracts.

Example: P190 PL01THE PLACE OF USE IS GENERALLY FROM TWP 20N TO TWP 23N, AND FROM RGE 07W TO RGE 02E, CASCADE, LEWIS AND CLARK, AND TETON COUNTIES. FOR THE COMPLETE DETAILED PLACE OF USE DESCRIPTION, SEE FILE NO. W000000-00.

(Note: One or more counties can be coded.)

- When the POU is exceptionally large (more than 200-300 parcel records), the POU need not be retained to appear on the "W" abstracts. Add a place of use (PL) remark to the decree abstract of each "W" abstract (see above example).

This option, if pursued, should be discussed with the program manager.

In addition to associating the POU to each "W" abstract, put a complete set of documentation, maps and other related materials in each "W" file. If the amount of documentation, maps and other related materials is overabundant, place the original documents in the lowest numbered "W" file, add a flag the "Z" file, and add a general information (GI) remark to the decree abstract of the remaining "W" rights.

Example: G26 GI01THE COMPLETE SET OF DOCUMENTATION, MAPS AND OTHER RELATED MATERIALS CAN BE OBTAINED BY REVIEWING FILE NO. W000000-00.

4. Examination Of Water Supply Organization Claims.

Except as specifically provided in this section, examination of water supply organization claims will follow the procedures described in the appropriate section governing the identified purpose.

a. Point Of Diversion. All PODs identified in the irrigation district claim form will be listed on the "Z" worksheet. Try to determine which PODs match which "W" numbers.

When specific points of diversion can be readily identified with the corresponding water right, add those PODs to the specific "W" abstract using a POD code sheet. This was sometimes done when the claim was originally entered into the computer.

If the PODs as identified on the "Z" worksheet cannot be associated with specific "W" water rights, the claimant may be contacted. When PODs cannot be separately identified with individual rights, then add all the PODs to each "W" worksheet.

b. Place Of Use. All claims filed on irrigation district forms will have their place of use examined.

Combined Parcels. Prior to examining the claimed parcels, attempt to combine parcels. In doing so, try to retain precision in describing irrigated areas. Combine only fully irrigated parcels. After combining parcels, the worksheet may be sent to records to be coded and a new worksheet requested.

Example:	<u>AC</u>	<u>SEC</u>	combines to:	<u>AC</u>	<u>SEC</u>
	160	NW 30		320	N2 30
	160	NE 30		160	SW 30
	160	SW 30		90	SE 30
	90	SE 30			
			NOT:	570	30

General POU Review. Compare the claimed POU, submitted maps, and documentation to the aerial photographs. Follow the procedures in "Irrigation: Place of Use" for reviewing the claimed POU land

descriptions and irrigated acreage. Follow the POU recording procedures in the Irrigation section, as well. However, it may be clearer to record the POU claimed and examined on new mylar overlays.

There are additional review procedures unique to irrigation district POU's. The limits of the district service area must be compared to the claimed POU land description. Then the acres claimed must be compared to the acres irrigated within the service area, as evident on the department's data sources. Attempt to distinguish parcels served by the irrigation district from parcels served exclusively by private water rights.

Use the documentation of the district's incorporation to review the claimed POU land descriptions for containment within their service area. Determine the limits of the district's area from their maps and documentation and other available materials. Compare this area to the POU claimed and to the aerial photographs.

If the claimed POU exceeds the contact point range, or there appears to be discrepancies between the district's service area and the claimed POU, contact the claimant. This may not be as clearly defined a decision as with individual irrigation claims. If in doubt, have the water resources specialist or regional manager review the POU before contacting the claimant.

Exceptionally Large POU's. For irrigation district claims having extremely large acreage, the claimed POU may be examined using other methods instead of using aerial photographs and recording on mylar overlays. The program manager must approve a decision not to make a full examination of the POU of a claim.

c. Flow Rate.

"Z" Numbers. The total claimed flow rate will be listed on the "Z" worksheet. This total flow rate figure should be compared to the documentation to determine whether the diversion and conveyance facilities are capable of handling the claimed flow. The "Z" flow rate should also be compared to the sum of the "W" rates. If they are not equal, or if the claimed flow appears to exceed the conveyance capacity, contact the claimant. If necessary, a field investigation may be conducted.

When such issues are unresolved, add the appropriate flow rate (FR) remark to the department's examination report on all "W" numbers.

Examples: F135 FR51THE CLAIMED FLOW RATE APPEARS TO EXCEED THE CAPACITY OF THE DIVERSION AND CONVEYANCE FACILITIES.

**** FR51THE TOTAL FLOW RATE CLAIMED ON THE IRRIGATION DISTRICT FORM DOES NOT EQUAL THE SUM OF THE INDIVIDUAL CLAIMED RIGHTS.

When claimed POU is not fully examined the guideline for flow rate will be based on total claimed acres.

"W" Numbers. The individual flow rate associated with the specific right will be listed on the "W" worksheet. These flow rates will be reviewed according to "Irrigation: Flow Rate."

Check the combined total of all "W" number flow rates against the "Z" number flow rate. If not equal, proceed as described above.

d. Volume. The total claimed volume will be listed on the "Z" worksheet. Each "W" worksheet will show the volume claimed for that individual rights.

Volumes on irrigation district forms, both "Z" or "W", and for any purpose, will be examined according to the Volume section pertaining to the specific purpose.

5. Supplemental Rights. Irrigation supplemental rights involving water supply organizations other than irrigation districts created under Title 85, Chapter 7, MCA will be identified and reported using the procedures described in "Irrigation: Supplemental Rights."

Formal irrigation districts and irrigation projects will not be considered supplemental to claims submitted by individual water users. If uncertainty exists about whether to identify the supplemental relationship between an individual water user and an entity using an irrigation district claim form, consult the water resources specialist, regional manager, or program manager.

a. Remarking Supplemental Irrigation Districts.
When the water rights associated with an irrigation district created under Title 85, Chapter 7, MCA are supplemental, the supplemental rights area on the "W" worksheets will not be completed. If this area has been completed by the records section, delete the information. Instead, add the following supplemental rights (SR) remark containing all the "W" numbers to the department's examination report of each supplemental "W" abstract.

Example: S130 SR01THE WATER RIGHTS FOLLOWING THIS STATEMENT ARE SUPPLEMENTAL WHICH MEANS THE RIGHTS HAVE OVERLAPPING PLACES OF USE. THE RIGHTS CAN BE COMBINED TO IRRIGATE ONLY OVERLAPPING PARCELS. EACH RIGHT IS LIMITED TO THE FLOW RATE AND PLACE OF USE OF THAT INDIVIDUAL RIGHT. THE SUM TOTAL VOLUME OF THESE WATER RIGHTS SHALL NOT EXCEED THE AMOUNT PUT TO HISTORICAL AND BENEFICIAL USE. W000000-00, W000000-00.

b. Uses Other Than Irrigation. When irrigation district forms have been filed for uses other than irrigation (i.e., municipal commercial), supplemental rights will be identified and

remarked, using the procedures described in "Other Uses: Place of Use."

6. Claims To Irrigation District Rights Filed By Individuals. Occasionally individuals filed claims on irrigation district rights. When it is apparent from the claim form or documentation that an individual has filed on an irrigation district right (e.g., claimant mentions "15 shares" on claim form, or documentation contains a contract or certificate for shares), contact the claimant.

If the claimant confirms the duplication, the claimant may withdraw the claim. If the issue is unresolved, add the following remark to the examination report of the claim filed by the individual.

Example: D95 DU51THIS CLAIM APPEARS TO DUPLICATE CLAIM NO.
W000000-00 FILED BY THE NORTH CHINOOK IRRIGATION
ASSOCIATION.